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1934

FEDERAL REGISTER

VOLUME 28 NUMBER 86

Washington, Thursday, May 2, 1963

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FEDERAL REGISTER

Telephone WOrth 3-3261

Published daily, except Sundays, Mondays, and days following official Federal holidays, by the Office of the Federal Register, National Archives and Records Service, General Services Administration, pursuant to the authority contained in the Federal Register Act, approved July 26, 1935 (49 Stat. 500, as amended; 44 U.S.C., ch. 8B), under regulations prescribed by the Administrative Committee of the Federal Register, approved by the President. Distribution is made only by the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

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Rules and Regulations

Title 26—INTERNAL REVENUE

Chapter I—Internal Revenue Service, Department of the Treasury

SUBCHAPTER D—MISCELLANEOUS EXCISE TAXES

[T. D. 6650]

PART 48—MANUFACTURERS AND RETAILERS EXCISE TAXES

Subpart O—Refunds and Other Administrative Provisions of Special Application to Retailers and Manufacturers Taxes

On March 3, 1962, notice of proposed rule making was published in the FEDERAL REGISTER (27 F.R. 2104) regarding the regulations of special application to the retailers and manufacturers excise taxes imposed by chapters 31 and 32, respectively, of the Internal Revenue Code of 1954, to be prescribed under section 6416 of such Code. After consideration of all such relevant matter as was presented by interested persons regarding the rules proposed, the regulations as proposed are hereby adopted subject to the following changes:

PARAGRAPH 1. Paragraph (d) (1) (ii) (*b*) of § 48.6416(a)-1, as set forth in the notice of proposed rule making, is revised.

PAR. 2. Section 48.6416(b), as set forth in the notice of proposed rule making, is amended by revising section 6416(b) (2) (H), and by revising the historical note.

PAR. 3. Paragraphs (a), (b) (1) (ii) (*a*), (b) (2), and (d) of § 48.6416(b)-1, as set forth in the notice of proposed rule making, are revised.

PAR. 4. Paragraphs (b) (8) and (c) of § 48.6416(b)-2, as set forth in the notice of proposed rule making, are revised.

PAR. 5. Paragraph (c) of § 48.6416(b)-3, as set forth in the notice of proposed rule making, is revised.

PAR. 6. Paragraph (c) of § 48.6416(b)-4, as set forth in the notice of proposed rule making, is revised.

PAR. 7. Paragraph (c) of § 48.6416(b)-5, as set forth in the notice of proposed rule making, is revised.

PAR. 8. Paragraph (b) of § 48.6416(d)-1, as set forth in the notice of proposed rule making, is revised.

[SEAL] MORTIMER M. CAPLIN,
Commissioner of Internal Revenue.

Approved: April 26, 1963.

STANLEY S. SURREY,
Assistant Secretary of the Treasury.

The following regulations, relating to refund or credit of amounts paid as tax under chapter 31 or 32 of the Internal Revenue Code of 1954, are prescribed under section 6416 of such Code. Except where otherwise specifically provided, such regulations are applicable on and after January 1, 1959. The Regulations on Determination of Price and Price Readjustments (26 CFR 330.1-2) are superseded to the extent of the subject matter within the scope of § 48.6416 (b)-1 of the Manufacturers and Retailers Excise Tax Regulations set forth below.

Subpart O—Refunds and Other Administrative Provisions of Special Application to Retailers and Manufacturers Taxes

Sec.
48.6416(a) Statutory provisions; certain taxes on sales and services; condition to allowance.
48.6416(a)-1 Refund or credit of tax under chapter 31 or 32.
48.6416(b) Statutory provisions; special cases in which tax payments considered overpayments.
48.6416(b)-1 Readjustments of price on which manufacturers or retailers excise tax is based.
48.6416(b)-2 Tax payments deemed to be overpayments by reason of certain uses, sales, or resales.
48.6416(b)-3 Articles sold tax-paid by manufacturer thereof to another manufacturer for specified use.
48.6416(b)-4 Tires, inner tubes, or certain receiving sets sold by the manufacturer thereof with or as a part of another article manufactured by him.
48.6416(b)-5 Return of installment accounts.
48.6416(c) Statutory provisions; credit for tax paid on tires, inner tubes, or radio or television receiving sets.
48.6416(c)-1 Credit for tax paid on tires, inner tubes, or automobile radio or television receiving sets.
48.6416(d) Statutory provisions; mechanical pencils taxable as jewelry.
48.6416(d)-1 Articles taxable as jewelry.
48.6416(e) Statutory provisions; refund to exporter or shipper.
48.6416(e)-1 Refund to exporter or shipper.
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48.6416(f)-1 Credit on returns.
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48.6416(h) Statutory provisions; accounting procedures for like articles.
48.6416(h)-1 Accounting procedures for like articles.
48.6416(i) Statutory provisions; meaning of terms.

AUTHORITY: §§ 48.6416(a) to 48.6416(i) issued under sec. 7805, I.R.C. 1954; 68A Stat. 917; 26 U.S.C. 7805.

§ 48.6416(a) Statutory provisions; certain taxes on sales and services; condition to allowance.

SEC. 6416. *Certain taxes on sales and services*—(a) *Condition to allowance*—(1) *General rule.* No credit or refund of any overpayment of tax imposed by * * * chapter 31 (retailers taxes), or chapter 32 (manufacturers taxes) shall be allowed or made unless the person who paid the tax establishes, under regulations prescribed by the Secretary or his delegate, that he—

(A) Has not included the tax in the price of the article * * * with respect to which it was imposed and has not collected the amount of the tax from the person who purchased such article, * * *;

(B) Has repaid the amount of the tax—

(i) In the case of any tax imposed by chapter 31 (other than the tax imposed by section 4041 (a) (1) or (b) (1)), to the purchaser of the article,

(ii) In the case of any tax imposed by chapter 32 and the tax imposed by section 4041 (a) (1) or (b) (1) (diesel and special motor fuels), to the ultimate purchaser of the article, or

* * * * *

(C) In the case of an overpayment under subsection (b) (2), (b) (3) (C) or (D), or (b) (4) of this section—

(i) Has repaid or agreed to repay the amount of the tax to the ultimate vendor of the article, or

(ii) Has obtained the written consent of such ultimate vendor to the allowance of the credit or the making of the refund; or

(D) Has filed with the Secretary or his delegate the written consent of the person referred to in subparagraph (B) (i), (ii), * * * as the case may be, to the allowance of the credit or the making of the refund.

(2) *Exceptions.* This subsection shall not apply to—

(A) The tax imposed by section 4041 (a) (2) or (b) (2) (use of diesel and special motor fuels), and

(B) An overpayment of tax under paragraph (1), (3) (A) or (B), or (5) of subsection (b) of this section.

(3) *Special rules.* For purposes of this subsection—

* * * * *

(B) If tax under chapter 31 was paid by a supplier pursuant to an agreement under section 6011(c), either the person who (without regard to section 6011(c)) was required to return and pay the tax or the supplier may be treated as the person who paid the tax;

(C) In any case in which the Secretary or his delegate determines that an article is not taxable, the term "ultimate purchaser" (when used in paragraph (1) (B) (ii) of this subsection) includes a wholesaler, jobber, distributor, or retailer who, on the 15th day after the date of such determination, holds such article for sale; but only if claim for credit or refund by reason of this subparagraph is filed on or before the day for filing the return with respect to the taxes imposed under chapter 32 for the first period which begins more than 60 days after the date of such determination; and

(D) In applying paragraph (1) (C) to any overpayment under paragraphs (2) (F), (3) (C) or (D), or (4) of subsection (b), the term "ultimate vendor" means the ultimate vendor of the other article.

[Sec. 6416(a) as amended and in effect Jan. 1, 1959]

§ 48.6416(a)-1 Refund or credit of tax under chapter 31 or 32.

(a) *In general.* Any claim for refund or credit of an overpayment of tax under chapter 31 (retailers excise taxes) or chapter 32 (manufacturers excise taxes) shall be made in accordance with the applicable provisions of this subpart and the applicable provisions of § 301.6402-2 of this chapter (Regulations on Procedure and Administration). A claim on Form 843 is not required in the case of a claim for credit, but the amount of the credit shall be claimed by entering such amount as a credit on a return of tax under chapter 31 or 32, whichever is appropriate, filed by the person making the claim. See § 48.6416(f)-1.

(b) *Retailers tax under chapter 31 (other than section 4041—*(1) *In general—*(i) *Supporting evidence required.* No refund or credit of any overpayment of tax under chapter 31 (not including section 4041, relating to the tax on the sale or use of diesel or special motor fuel) shall be allowed unless the person who paid the tax to the United States submits in support of his claim—

(*a*) A statement establishing that he has not included the tax in the price of the article with respect to which it was imposed and has not collected the amount of the tax from his vendee, or

(*b*) A statement establishing that he has repaid the amount of the tax to the purchaser of the article, or

(*c*) The written consent of such purchaser to the allowance of the refund or credit.

(ii) *Purchaser.* The term "purchaser", as used in subdivision (i) of this subparagraph, means the person to whom the article was sold tax-paid by the person claiming refund or credit.

(2) *Special rule in respect of tax paid by supplier.* In any case in which the tax was paid by a supplier, pursuant to an agreement under section 6011(c), either the supplier or the person who, except for the agreement, would have been required to return and pay the tax (hereinafter in this subparagraph referred to as retailer) may be treated as the person who paid the tax for purposes of claiming refund or credit of any overpayment of such tax. However, any such claim is subject to the requirements of subparagraph (1) of this paragraph. If the claim is filed by the supplier, any supporting evidence required under subdivision (i)(*b*) or (i)(*c*) of such subparagraph (1) must be in respect of the person to whom the article was sold tax-paid by the retailer, rather than in respect of the retailer. If the claim is filed by the retailer, the claim shall include (i) a statement that the retailer has obtained from the supplier a written statement that the supplier has not claimed refund or credit of the overpayment, or if so, such claim has been rejected, and that the supplier will not claim refund or credit of such amount, or (ii) a statement explaining the retailer's inability to obtain from the supplier the statement referred to in subdivision (i) of this subparagraph.

(3) *Overpayments in respect of which this paragraph is inapplicable.* This paragraph has no application in respect of any overpayment determined under section 6416(b)(1) (relating to price readjustments), or section 6416(b)(5) (relating to the return to the seller of certain installment accounts which he had previously sold).

(c) *Retailers tax under section 4041—*(1) *In general—*(i) *Supporting evidence required.* No refund or credit of any overpayment of tax under section 4041 (a)(1) (relating to the tax on the sale of diesel fuel), or section 4041(b)(1) (relating to the tax on the sale of special motor fuel) shall be allowed unless the person who paid the tax to the United States submits in support of his claim—

(*a*) A statement establishing that he has not included the tax in the price of the fuel with respect to which it was imposed and has not collected the amount of the tax from the vendee, or

(*b*) A statement establishing that he has repaid the amount of the tax to the ultimate purchaser of the fuel, or

(*c*) The written consent of such ultimate purchaser to the allowance of the refund or credit.

(ii) *Ultimate purchaser.* The term "ultimate purchaser", as used in subdivision (i) of this subparagraph, means the person to whom the fuel was sold tax-paid by the person claiming refund or credit.

(iii) *Overpayments in respect of which this subparagraph is inapplicable.* This subparagraph has no application in respect of any overpayment determined under section 6416(b)(2) (relating to tax payments which are considered to be overpayments in the case of certain uses, sales, or resales of a taxable article).

(2) *Overpayments determined under section 6416(b)(2)—*(i) *Supporting evidence required.* In the case of amounts paid as tax under section 4041(a)(1) (relating to the tax on the sale of diesel fuel) or section 4041(b)(1) (relating to the tax on the sale of special motor fuel) which are determined to be overpayments by reason of section 6416(b)(2) (relating to tax payments which are considered to be overpayments in the case of certain uses, sales, or resales of a taxable article), no refund or credit shall be allowed unless the person who paid the tax to the United States submits in support of his claim a statement establishing that—

(*a*) He has not included the tax in the price of the fuel with respect to which it was imposed and has not collected the amount of the tax from his vendee, or

(*b*) He has repaid or agreed to repay the amount of the tax to the ultimate vendor of the fuel, or

(*c*) He has obtained the written consent of such ultimate vendor to the allowance of the refund or credit.

(ii) *Ultimate vendor.* The term "ultimate vendor", as used in subdivision (i) of this subparagraph, means the person making the sale which gives rise to the overpayment or which last precedes the exportation or use which gives rise to the overpayment.

(iii) This subparagraph has no application in any case where the claim is for refund or credit of an overpayment determined under section 6416(b)(2)(G) and paragraph (b)(7)(ii)(*b*) of § 48.6416 (b)-2 in respect of fuel used on a farm for farming purposes by a person other than the owner, tenant, or operator of such farm.

(3) *Amounts paid as tax under section 4041(a)(2) or section 4041(b)(2).* This paragraph has no application in respect of any overpayment of tax under section 4041(a)(2) (relating to the tax on the use of diesel fuel), or section 4041(b)(2) (relating to the tax on the use of special motor fuel). Refund or credit of any such overpayment is subject to the provisions of section 6402 and § 301.6402-2 of this chapter (Regulations on Procedure and Administration).

(d) *Manufacturers tax under chapter 32—*(1) *In general—*(i) *Supporting evidence required.* No refund or credit of any overpayment of tax under chapter 32 shall be allowed unless the person who paid the tax to the United States submits in support of his claim—

(*a*) A statement establishing that he has not included the tax in the price of the article with respect to which it was imposed and has not collected the amount of the tax from his vendee, or

(*b*) A statement establishing that he has repaid the amount of the tax to the ultimate purchaser of the article, or

(*c*) The written consent of such ultimate purchaser to the allowance of the refund or credit.

(ii) *Ultimate purchaser—*(a) *General rule.* Except as provided in (*b*) of this subdivision (ii), the term "ultimate purchaser", as used in subdivision (i) of this subparagraph, means the person who purchased the article for consumption, or for use in the manufacture of other articles and not for resale in the form in which purchased.

(*b*) *Special rule under section 6416(a)(3)(C).* If tax under chapter 32 is paid in respect of an article and the Commissioner determines that such article is not subject to tax under such chapter, the term "ultimate purchaser", as used in subdivision (i) of this subparagraph, includes any wholesaler, jobber, distributor, or retailer who, on the 15th day after the date of such determination, holds for sale any such article with respect to which tax has been paid. However, the rule set forth in the preceding sentence shall have application only if the claim for refund or credit of the overpayment in respect of the articles held for sale by a wholesaler, jobber, distributor, or retailer is filed on or before the date on which the person who paid the tax is required to file a return for the period ending with the first calendar quarter which begins more than 60 days after the date of such determination by the Commissioner. A claim for refund or credit of an overpayment of tax in respect of an article as to which a wholesaler, jobber, distributor, or retailer is the ultimate purchaser, as provided in this subdivision, must be supported by a statement that the person filing the claim has in his possession a statement, by each wholesaler, jobber, distributor, or retailer whose articles are covered by the claim, showing his total inventory, by model number and quantity, of all such articles purchased tax-paid and held for sale as of 12:01 a.m. of the 15th day after the date of the determination by the Commissioner that the article is not subject to tax under chapter 32. Such inventory shall not include any such article title to which, or possession of which, has previously been transferred to any person for purposes of consumption (unless the entire purchase price was repaid to such person or credited to his account and the sale rescinded), nor shall there be included any such article purchased by the wholesaler, jobber, distributor, or retailer as a component part of, or on or in connection with, another article. An article in transit at the first moment of such 15th day shall be regarded as being held by the person to whom shipped, except that where title to such article does not pass until delivered to such person, such article shall be deemed to be held by the shipper.

(iii) *Overpayments in respect of which this subparagraph is inapplicable.* This subparagraph has no application in respect of any overpayment determined under section 6416(b)(2) (relating to tax payments which are considered to be overpayments in the case of certain uses, sales, or resales of a taxable article), or under section 6416(b)(3) (C) or (D) or section 6416(b)(4) (relating to certain cases where tax payments in respect of tires, inner tubes, or certain radio or television receiving sets are considered to be overpayments). For other limitations, see subparagraph (3) of this paragraph.

(2) *Overpayments determined under section 6416(b)(2), section 6416(b)(3) (C) or (D), or section 6416(b)(4)*—(i) *In general.* In the case of amounts paid as tax under chapter 32 which are determined to be overpayments by reason of section 6416(b)(2) (relating to tax payments which are considered to be overpayments in the case of certain uses, sales, or resales of a taxable article), or under section 6416(b)(3) (C) or (D) or section 6416(b)(4) (relating to certain cases where tax payments in respect of tires, inner tubes, or certain radio or television receiving sets are considered to be overpayments), no refund or credit shall be allowed unless the person who made the overpayment to the United States submits in support of his claim a statement establishing that—

(*a*) He has not included the tax in the price of the article with respect to which it was imposed, and has not collected the amount of the tax from his vendee, or

(*b*) He has repaid or agreed to repay the amount of the tax to the ultimate vendor of the article, or

(*c*) He has obtained the written consent of such ultimate vendor to the allowance of the refund or credit.

(ii) *Ultimate vendor*—(*a*) *General rule.* The term "ultimate vendor", as used in subdivision (i) of this subparagraph, means the person making the sale which gives rise to the overpayment or which last precedes the exportation or use which gives rise to the overpayment.

(*b*) *Special rule.* In the case of an overpayment determined under section 6416(b)(2)(F) (see paragraph (b)(6) of § 48.6416(b)-2), section 6416(b)(3) (C) or (D) (see paragraph (b)(2) of § 48.6416(b)-3), or section 6416(b)(4) (see paragraph (b) of § 48.6416(b)-4), where the taxable article is used as a component part of, or sold on or in connection with or with the sale of, a second article which is exported, sold to a nonprofit educational organization for its exclusive use, sold to a State or local government for the exclusive use of a State or local government, or used or sold for use as supplies for vessels or aircraft, the term "ultimate vendor", as used in subdivision (i) of this subparagraph, means the ultimate vendor of the second article.

(3) *Overpayments in respect of which this paragraph is inapplicable.* This paragraph has no application in the case of an overpayment determined under section 6416(b)(1) (relating to price readjustments), section 6416(b)(3) (A) or (B) (relating to certain cases in which refund or credit is allowable to the manufacturer who uses, in the further manufacture of a second article, a taxable article purchased by him tax-paid from the manufacturer thereof), or section 6416(b)(5) (relating to the return to the seller of certain installment accounts which he had previously sold).

§ 48.6416(b) Statutory provisions; special cases in which tax payments considered overpayments.

SEC. 6416. *Certain taxes on sales and services* * * *

(b) *Special cases in which tax payments considered overpayments.* Under regulations prescribed by the Secretary or his delegate, credit or refund (without interest) shall be allowed or made in respect of the overpayments determined under the following paragraphs:

(1) *Price readjustments.* If the price of any article in respect of which a tax, based on such price, is imposed by chapter 31 or 32, is readjusted by reason of the return or repossession of the article or a covering or container, or by a bona fide discount, rebate, or allowance, including (in the case of a tax imposed by chapter 32) a readjustment for local advertising (but only to the extent provided in section 4216(f) (2) and (3)), the part of the tax proportionate to the part of the price repaid or credited to the purchaser shall be deemed to be an overpayment. The preceding sentence shall not apply in the case of an article in respect of which tax was computed under section 4223 (b)(2); but if the price for which such article was sold is readjusted by reason of the return or repossession of the article, the part of the tax proportionate to the part of such price repaid or credited to the purchaser shall be deemed to be an overpayment.

(2) *Specified uses and resales.* The tax paid under chapter 32 (or under section 4041 (a)(1) or (b)(1)) in respect of any article shall be deemed to be an overpayment if such article was, by any person—

(A) Exported (except in any case to which subsection (g) applies);

(B) Used or sold for use as supplies for vessels or aircraft;

(C) Sold to a State or local government for the exclusive use of a State or local government;

(D) Sold to a nonprofit educational organization for its exclusive use;

(E) Resold to a manufacturer or producer for use by him as provided in subparagraph (A), (B), (E), or (F) of paragraph (3);

(F) In the case of a tire, inner tube, or receiving set, resold for use as provided in subparagraph (C) or (D) of paragraph (3) and the other article referred to in such subparagraph is by any person exported or sold as provided in such subparagraph;

(G) In the case of a liquid taxable under section 4041, sold for use as fuel in a diesel-powered highway vehicle or as fuel for the propulsion of a motor vehicle, motorboat, or airplane, if (i) the vendee used such liquid otherwise than as fuel in such a vehicle, motorboat, or airplane or resold such liquid, or (ii) such liquid was (within the meaning of paragraphs (1), (2), and (3) of section 6420(c)) used on a farm for farming purposes;

(H) In the case of a liquid in respect of which tax was paid under section 4041 at the rate of 3 cents or 4 cents a gallon, used during any calendar quarter in vehicles while engaged in furnishing scheduled common carrier public passenger land transportation service along regular routes; except that (i) this subparagraph shall apply only if the 60 percent passenger fare revenue test set forth in section 6421(b)(2) is met with respect to such quarter, and (ii) the amount of such overpayment for such quarter shall be an amount determined by multiplying 1 cent (where tax was paid at the 3-cent rate) or 2 cents (where tax was paid at the 4-cent rate) for each gallon of liquid so used by the percentage which such person's commuter fare revenue (as defined in section 6421(d)(2)) derived from such scheduled service during such quarter was of his total passenger fare revenue derived from such scheduled service during such quarter;

(I) In the case of a liquid in respect of which tax was paid under section 4041(a)(1) at the rate of 3 cents or 4 cents a gallon, used or resold for use as a fuel in a diesel-powered highway vehicle (i) which (at the time of such use or resale) is not registered, and is not required to be registered, for highway use under the laws of any State or foreign country, or (ii) which, in the case of a diesel-powered highway vehicle owned by the United States, is not used on the highway; except that the amount of any overpayment by reason of this subparagraph shall not exceed an amount computed at the rate of 1 cent a gallon where tax was paid at the 3-cent rate or at the rate of 2 cents a gallon where tax was paid at the 4-cent rate;

(J) In the case of a liquid in respect of which tax was paid under section 4041(b)(1) at the rate of 3 cents or 4 cents a gallon, used or resold for use otherwise than as a fuel for the propulsion of a highway vehicle (i) which (at the time of such use or resale) is registered, or is required to be registered, for highway use under the laws of any State or foreign country, or (ii) which, in the case of a highway vehicle owned by the United States, is used on the highway; except that the amount of any overpayment by reason of this subparagraph shall not exceed an amount computed at the rate of 1 cent a gallon where tax was paid at the 3-cent rate or at the rate of 2 cents a gallon where tax was paid at the 4-cent rate;

(K) In the case of any article taxable under section 4061(b) (other than spark plugs and storage batteries), used or sold for use as repair or replacement parts or accessories for farm equipment (other than equipment taxable under section 4061(a));

(L) In the case of tread rubber in respect of which tax was paid under section 4071 (a)(4), used or sold for use otherwise than in the recapping or retreading of tires of the type used on highway vehicles (as defined in section 4072(c)), unless credit or refund of such tax is allowable under subsection (b)(3);

(M) In the case of gasoline, used or sold for use in production of special motor fuels referred to in section 4041(b);

(N) In the case of lubricating oil, used or sold for nonlubricating purposes;

(O) In the case of lubricating oil in respect of which tax was paid at the rate of 6 cents a gallon, used or sold for use as cutting oils (within the meaning of section 4092(b)); except that the amount of such overpayment shall not exceed an amount computed at the rate of 3 cents a gallon;

(P) In the case of any musical instrument taxable under section 4151, sold to a religious institution for exclusively religious purposes;

(Q) In the case of unexposed motion picture film, used or sold for use in the making of newsreel motion picture film.

(3) *Tax-paid articles used for further manufacture, etc.* If the tax imposed by chapter 32 has been paid with respect to the sale of any article by the manufacturer, producer, or importer thereof to a second manufacturer or producer, such tax shall be deemed to be an overpayment by such second manufacturer or producer if—

(A) In the case of any article other than an article to which subparagraph (B), (C), (D), or (E) applies, such article is used by the second manufacturer or producer as material in the manufacture or production of, or as a component part of, another article taxable under chapter 32 manufactured or produced by him;

(B) In the case of—

(i) A part or accessory taxable under section 4061(b),

(ii) A radio or television component taxable under section 4141, or

(iii) A camera lens taxable under section 4171,

such article is used by the second manufacturer or producer as material in the manufacture or production of, or as a component part of, any other article manufactured or produced by him;

(C) In the case of—

(i) A tire or inner tube taxable under section 4071, or

(ii) An automobile radio or television receiving set taxable under section 4141,

such article is sold by the second manufacturer or producer on or in connection with, or with the sale of, any other article manufactured or produced by him and such other article is by any person exported, sold to a State or local government for the exclusive use of a State or local government, sold to a nonprofit educational organization for its exclusive use, or used or sold for use as supplies for vessels or aircraft;

(D) In the case of a radio receiving set or an automobile radio receiving set—

(i) Such set is used by the second manufacturer or producer as a component part of any other article manufactured or produced by him, and

(ii) Such other article is by any person exported, sold to a State or local government for the exclusive use of a State or local government, sold to a nonprofit educational organization for its exclusive use, or used or sold for use as supplies for vessels or aircraft;

(E) In the case of—

(i) A bicycle tire (as defined in section 4221(e)(4)(B)), or

(ii) An inner tube for such a tire,

such article is used by the second manufacturer or producer as material in the manufacture or production of, or as a component part of, a bicycle (other than a rebuilt or reconditioned bicycle); or

(F) In the case of gasoline taxable under section 4081, such gasoline is used by the second manufacture or producer, for nonfuel purposes, as a material in the manufacture or production of any other article manufactured or produced by him.

For purposes of subparagraphs (A) and (B), an article shall be treated as having been used as a component part of another article if, had it not been broken or rendered useless in the manufacture or production of such other article, it would have been so used.

(4) *Tires, inner tubes, and automobile radio and television receiving sets.* If—

(A)(i) A tire or inner tube taxable under section 4071, or automobile radio or television receiving set taxable under section 4141, is sold by the manufacturer, producer, or importer thereof on or in connection with, or with the sale of, any other article manufactured or produced by him, or

(ii) A radio receiving set or an automobile radio receiving set is used by the manufacturer thereof as a component part of any other article manufactured or produced by him; and

(B) Such other article is by any person exported, sold to a State or local government for the exclusive use of a State or local government, sold to a nonprofit educational organization for its exclusive use, or used or sold for use as supplies for vessels or aircraft,

any tax imposed by chapter 32 in respect of such tire, inner tube, or receiving set which has been paid by the manufacturer, producer, or importer thereof shall be deemed to be an overpayment by him.

(5) *Return of certain installment accounts.* If—

(A) Tax was paid under section 4053(b)(1) or 4216(e)(1) in respect of any installment account,

(B) Such account is, under the agreement under which the account was sold, returned to the person who sold such account, and

(C) The consideration is readjusted as provided in such agreement,

the part of the tax paid under section 4053(b)(1) or 4216(e)(1) proportionate to the part of the consideration repaid or credited to the purchaser of such account shall be deemed to be an overpayment.

This subsection shall apply in respect of an article only if the exportation or use referred to in the applicable provision of this subsection occurs before any other use, or, in the case of a sale or resale, the use referred to in the applicable provision of this subsection is to occur before any other use.

[Sec. 6416(b) as amended and in effect with respect to articles exported, sold, or resold, as the case may be, on or after Jan. 1, 1959, and as further amended by sec. 201(d), Federal-Aid Highway Act 1959 (73 Stat. 613); sec. 3, Act of Apr. 8, 1960 (Pub. Law 86–418, 74 Stat. 38); sec. 2, Act of Sept. 14, 1960 (Pub. Law 86–781, 74 Stat. 1018); sec. 205 (c) and (d), Federal-Aid Highway Act 1961 (75 Stat. 126); sec. 5(c)(3), Tax Rate Extension Act 1962 (76 Stat. 119)]

§ 48.6416(b)–1 Readjustments of price on which manufacturers or retailers excise tax is based.

(a) *In general.* In the case of any payment of tax under chapter 31 or chapter 32 which is determined to be an overpayment by reason of a price readjustment, within the meaning of this section, the person who paid the tax to the United States may file a claim for refund of such overpayment or may claim credit for the overpayment on any return of tax under chapter 31 or chapter 32, whichever is appropriate, which he subsequently files. Price readjustments may not be anticipated. However, if the readjustment has actually been made before the return is filed for the period in which the sale was made, the tax to be reported in respect of such sale may, at the election of the taxpayer, be based on the price as so readjusted, or may be based on the original sale price and a credit or refund claimed in respect of the price readjustment. No interest shall be paid on any refund or credit allowed under this section. For provisions relating to the evidence required in support of a claim for any such refund or credit, see § 301.6402–2 of this chapter (Regulations on Procedure and Administration) and paragraph (d) of this section. For provisions authorizing the taking of a credit in lieu of filing a claim for refund, see section 6416(f) and § 48.6416(f)–1.

(b) *Determination of price readjustment*—(1) *In general*—(i) *Rules of usual application.* In any case in which a person has paid to the United States the tax under chapter 31 or chapter 32 based on the price of any article, and such price is readjusted, that part of the tax which is proportionate to the part of such price which is repaid or credited to such person's vendee is considered to be an overpayment. A readjustment of price to the vendee may occur by reason of—

(*a*) The return of the article,

(*b*) The repossession of the article,

(*c*) The return or repossession of the covering or container of the article, or

(*d*) A bona fide discount, rebate, or allowance against the price at which the article was sold.

A price readjustment will not be deemed to have been made, in any case, unless the person who paid such tax repays all or a part of the purchase price in cash to his vendee, or credits the vendee's account. Commissions to agents, or allowances payments, or adjustments made to persons other than such vendee are not considered as effectuating price readjustments under any circumstances. In any case in which a price readjustment is deemed to have been made in respect of an article, the credit or refund allowable in respect of such price readjustment may not exceed that part of the tax in respect of such article which bears the same ratio to the total of such tax as the amount repaid or credited to the vendee bears to the original price charged such vendee (including, for purposes of this computation, any tax passed on to the vendee).

(ii) *Rules of special application*—(*a*) *Constructive sale price.* In any case where the tax is based on a constructive sale price determined under section 4216(b)(1) (relating to certain sales at retail, sales on consignment, and sales not at arm's length for less than the fair market price), or under section 4216(b)(2) (relating to certain sales at retail, to retailers, or to special dealers), any factor which was taken into account, directly or indirectly, in the determination of such price may not again be taken into account so as to give rise to a price readjustment within the meaning of this section. This section has no application in any case where the tax is based on a constructive sale price determined under section 4218 (relating to use by the manufacturer).

(*b*) *Price determined under section 4223(b)(2).* If a manufacturer (within the meaning of section 4223(a)) to whom an article is sold or resold free of tax in accordance with the provisions of section 4221(a)(1) for use by him in further manufacture (*1*) diverts the article to a taxable use or sells it in a taxable sale, and (*2*) pursuant to the provisions of section 4223(b)(2), computes his tax liability in respect of such use or sale on the price for which the article was sold to him or on the price at which the article was sold by the actual manufacturer, a reduction of the price on which the tax was based does not result in an overpayment within the meaning of section 6416(b)(1) or this section. Moreover, in any case where a manufacturer purchases an article tax-free and computes the tax in respect of his sale of such article pursuant to the provisions of section 4223(b)(2), an overpayment does not arise by reason of a readjustment of the price for which the article was sold by him except where the readjustment results from the article's being returned to, or repossessed by, such manufacturer. See, however, subparagraph (2) of this paragraph as to repurchased articles.

(2) *Return of an article.* If a taxable article is returned to the person who paid the tax to the United States on the sale of such article, a price readjustment giving rise to an overpayment results—

(i) *Before use.* If the article is returned before use, and all of the purchase price is repaid to the vendee or credited to his account, or

(ii) *Under warranty.* If the article is returned under an express or implied warranty as to quality or service, and all or a part of the purchase price is repaid to the vendee or credited to his account, or

(iii) *Before passage of title.* If title is still in the seller, as, for example, in the case of certain installment sales contracts, and all or a part of the purchase price is repaid to the vendee or credited to his account.

Except as provided in subdivision (i), (ii), or (iii) of this subparagraph, a price readjustment does not result when a taxable article is returned to the person who paid the tax to the United States on the sale of such article, even though all or a part of the purchase price is repaid to the vendee or credited to his account, since such a transaction is considered to be a repurchase of the article by such person. This subparagraph shall be effective only in respect of articles returned on or after July 1, 1963.

(3) *Repossession of an article.* If a taxable article is repossessed by the person who paid the tax to the United States on the sale of such article, and all or a part of the purchase price is repaid to the vendee or credited to his account, a price readjustment giving rise to an overpayment results.

(4) *Return or repossession of covering or container.* If the covering or container of a taxable article is returned to or repossessed by the person who paid the tax to the United States on the sale of such article, and all or a portion of the purchase price is repaid to the vendee or credited to his account by reason of the return or repossession of such covering or container, a price readjustment giving rise to an overpayment results. If a taxable article is considered to have been repurchased, as provided in subparagraph (2), and the covering or container accompanies the taxable article as part of the transaction, it will be considered that the covering or container was also repurchased.

(5) *Bona fide discounts, rebates, or allowances*—(i) *In general.* Except as provided in paragraph (c) of this section (relating to reimbursements in respect of local advertising), the basic consideration in determining, for purposes of this section, whether a bona fide discount, rebate, or allowance has been made is whether the price actually paid by, or charged against, the purchaser has in fact been reduced by subsequent transactions between the parties. In general, the price will be considered as having been readjusted by reason of a bona fide discount, rebate, or allowance only if the person who made the taxable sale repays a part of the purchase price in cash to his vendee, or credits the vendee's account, in consideration of factors which, if taken into account at the time of the original transaction, would have resulted at that time in a lower sale price. For example, a price readjustment is considered to have been made when a bona fide discount, rebate, or allowance is given in consideration of such factors as prompt payment, quantity buying over a specified period, or, in the case of tax under chapter 32, the vendee's inventory of an article when new models are introduced or a general price reduction affecting articles held in stock by the vendee. On the other hand, repayments made to the vendee do not effectuate price readjustments if given in consideration of circumstances under which he has been or is required to incur an expense which, if treated as a separate item in the original transaction and not included in the price billed for the taxable article, would nevertheless have been includible in the price of the article for purposes of computing the tax. For example, in the case of tax under chapter 32, repayments made by a manufacturer to his vendee in consideration of an expenditure made or to be made by the vendee for advertising, other than advertising to which paragraph (c) of this section applies, or for demonstration or display of the manufacturer's product by the vendee, do not effectuate price readjustments. This subdivision has application only in respect of taxable sales made on or after January 1, 1961. The application of this subdivision in respect of the tax under chapter 32 may be illustrated by the following examples:

Example 1. B, a manufacturer of electric dishwashers, bills his distributors in a specified amount per dishwasher purchased by them. Thereafter, B issues to each distributor a credit memorandum in the amount of x dollars for each home demonstration by the distributor of the manufacturer's product. The credit which B allows the distributor for demonstration of B's product does not effect a readjustment of price.

Example 2. C, a manufacturer of automobiles, bills his dealers in a specified amount per automobile purchased by them. Thereafter, C remits to the dealer x dollars of the original sale price for each automobile sold by the dealer in the last month of the model year. An additional amount of y dollars is paid to the dealer upon a showing by the dealer that he has paid y dollars to the salesman who made the sale. In this case, the x dollars paid to the dealer by C constitutes a bona fide discount, rebate, or allowance since payment of such amount is in the nature of a price reduction by reason of the dealer's inventory when new models are introduced. However, the y dollars paid to the dealer in reimbursement for the amount paid by him to the salesman who made the sale, does not constitute a bona fide discount, rebate, or allowance. Moreover, such payment of y dollars is essentially an allowance by the manufacturer to a person other than the manufacturer's vendee and, as such, would not, in any event, be recognized as a price readjustment (see paragraph (b)(1)(i) of this section).

(ii) *Inability to collect price.* A charge-off of an amount outstanding in an open account, due to inability to collect, is not a bona fide discount, rebate, or allowance and does not, in and of itself, give rise to a price readjustment within the meaning of this section.

(iii) *Loss or damage in transit.* If title to an article has passed to the vendee, the subsequent loss, damage, or destruction of the article while in the possession of a carrier for delivery to the vendee, does not, in and of itself, affect the price at which the article was sold.

(c) *Reimbursements in respect of local advertising* * * * [For regulations under this paragraph, see Treasury Decision 6635 published in FEDERAL REGISTER dated February 7, 1963 (28 F.R. 1201).]

(d) *Supporting evidence required.* A claim for refund or credit by reason of a price readjustment within the meaning of this section shall not be allowed, in any case, unless the claim is supported by a statement, signed by the person who paid the tax to the United States—

(1) Describing the circumstances which gave rise to the price readjustment, and

(2) Showing that he has in his possession evidence—

(i) Identifying the article in respect of which the price readjustment was allowed;

(ii) Showing the price at which the article was sold, the amount of tax paid to the United States in respect of such article and the date of payment of the tax;

(iii) Giving the name and address of the person to whom the article was sold; and

(iv) Showing the amount repaid to such person or credited to his account.

This paragraph has application only in respect of claims filed on or after July 1, 1963.

§ 48.6416(b)–2 Tax payments deemed to be overpayments by reason of certain uses, sales, or resales.

(a) *In general.* Section 6416(b)(2) and paragraph (b) of this section provide that under certain circumstances tax under chapter 32 (manufacturers excise taxes) or under section 4041 (a)(1) or (b)(1) (diesel fuel and special motor fuel) paid to the United States shall be deemed to be an overpayment. Except as otherwise provided in section 6416(e) and § 48.6416(e)–1, refund or credit of any overpayment of tax within the meaning of section 6416(b)(2) and paragraph (b) of this section may be claimed only by the person who paid the tax to the United States. No interest shall be allowed on any refund or credit of such overpayment. For provisions relating to the evidence required in support of a claim for refund or credit of such overpayment, see § 301.-6402–2 of this chapter (Regulations on

Procedure and Administration) and paragraph (c) of this section. For provisions authorizing the taking of a credit in lieu of filing a claim for refund, see section 6416(f) and § 48.6416(f)-1.

(b) *Uses, sales, and resales giving rise to right of refund or credit.* Tax under chapter 32, or under section 4041, as the case may be, which is paid to the United States in respect of the sale of any article is considered to be an overpayment under the circumstances and to the extent set forth in subparagraphs (1) to (17), inclusive, of this paragraph. This paragraph has application only in those cases where the exportation, use, sale, or resale (or any combination thereof) referred to in any such subparagraph occurs before any other use. In the case of any article which is sold or resold for a use described in any such subparagraph and is not so used, such subparagraph shall become inapplicable *ab initio*.

(1) *Articles exported.* Subject to the limitation in section 6416(g) (see § 48.6416(g)-1), tax under chapter 32 paid to the United States on the sale of any article, or tax under section 4041 (a)(1) or (b)(1) paid to the United States on the sale of diesel fuel or special motor fuel, is considered to be an overpayment if such article or such fuel is by any person exported to a foreign country or shipped to a possession of the United States. Except in the case of articles specified in section 6416(g), it is immaterial for purposes of this subparagraph whether the person who made the taxable sale had knowledge at the time of such sale that such article or such fuel was being purchased for export to a foreign country or shipment to a possession of the United States. See § 48.6416(e)-1 for the circumstances under which a claim for refund or credit by reason of the exportation of an article may be claimed by the exporter or shipper rather than by the person who paid the tax.

(2) *Supplies for vessels or aircraft.* Tax under chapter 32 paid to the United States on the sale of any article, or tax under section 4041(b)(1) paid to the United States on the sale of special motor fuel, is considered to be an overpayment if such article or such fuel is used by any person, or is sold by any person for use by the purchaser, as supplies for vessels or aircraft. Pursuant to the provisions of section 6416(i), the term "supplies for vessels or aircraft" has the same meaning as when used in chapter 31 and chapter 32 of the Code. See sections 4041(e), 4221(a)(3), 4221(d)(3), and 4221(e), and the regulations thereunder.

(3) *State or local governments.* Tax under chapter 32 paid to the United States on the sale of any article, or tax under section 4041 (a)(1) or (b)(1) paid to the United States on the sale of diesel fuel or special motor fuel, is considered to be an overpayment if such article or fuel is by any person sold to a State, any political subdivision thereof, or the District of Columbia for the exclusive use of a State, any political subdivision thereof, or the District of Columbia. For provisions relating to tax-free sales to a State, any political subdivision thereof, or the District of Columbia, see the regulations under section 4055 or 4221(a)(4), whichever is applicable.

(4) *Nonprofit educational organizations.* Tax under chapter 32 paid to the United States on the sale of any article, or tax under section 4041 (a)(1) or (b)(1) paid to the United States on the sale of diesel fuel or special motor fuel, is considered to be an overpayment if such article or fuel is by any person sold to a nonprofit educational organization for its exclusive use. The term "nonprofit educational organization", as used in this subparagraph, has the same meaning as when used in section 4057, in the case of tax under section 4041 (a)(1) or (b)(1), and section 4221 (a)(5) and (d)(5), in the case of tax under chapter 32.

(5) *Articles resold for use in further manufacture*—(i) *General rule.* Except as otherwise provided in subdivision (ii) of this subparagraph, tax under chapter 32 paid to the United States on the sale of an article is considered to be an overpayment if—

(*a*) Such article is, after the original sale of such article by the manufacturer thereof, resold by any person to another manufacturer for use by such other manufacturer as material in the manufacture or production of, or as a component part of, a second article manufactured or produced by him, and

(*b*) The second article is an article which is taxable under chapter 32.

It is immaterial for purposes of this subdivision whether the second article is sold or otherwise disposed of, or, if sold, whether the sale is a taxable sale.

(ii) *Exceptions to general rule*—(*a*) *Articles referred to in section 6416(b)(3)(B) and (E).* Subdivision (i)(*b*) of this subparagraph has no application in respect of any article specified in section 6416(b)(3)(B) (a part or accessory taxable under section 4061(b), a radio or television component taxable under section 4141, or a camera lens taxable under section 4171), or section 6416 (b)(3)(E) (a bicycle tire, as defined in section 4221(e)(4)(B), or an inner tube for such a tire). Accordingly, in the case of any article specified in section 6416 (b)(3)(B), if the condition prescribed in subdivision (i)(*a*) of this subparagraph is met, it is immaterial whether the second article is or is not an article taxable under chapter 32. In the case of an article specified in section 6416 (b)(3)(E), tax paid on the sale by the manufacturer thereof will be considered to be an overpayment, if the condition prescribed in subdivision (i)(*a*) of this subparagraph is met and the article is used by the second manufacturer as material in the manufacture or production of, or as a component part of, a bicycle other than a rebuilt or reconditioned bicycle, but only if the sale of the article by the manufacturer thereof occurred on or after May 1, 1960.

(*b*) *Gasoline.* Subdivision (i)(*b*) of this subparagraph has no application in the case of gasoline taxable under section 4081 which is sold by the manufacturer on or after October 1, 1961, and which is used by a second manufacturer, for nonfuel purposes, as a material in the manufacture or production of any other article manufactured or produced by him. For provisions relating to use for nonfuel purposes, see section 4221 and the regulations thereunder contained in Subpart M.

(*c*) *Articles to which this subparagraph is inapplicable.* This subparagraph has no application in respect of a tire or inner tube taxable under section 4071 (other than a bicycle tire or tube used as provided in section 6416(b)(3)(E)) or an automobile radio or television receiving set taxable under section 4141.

(iii) *Article broken or rendered useless.* Any article to which this subparagraph has application (other than a bicycle tire or tube used as provided in section 6416(b)(3)(E)) which would have been used in the manufacture or production of a second article, except for the fact that it was broken or rendered useless in the process of the manufacture or production of such second article, shall be considered to have been used as a component part of such second article.

(iv) *Cross reference.* For provisions relating to who is deemed to have made the overpayment in respect of articles sold tax-paid by the manufacturer thereof direct to another manufacturer who uses them for further manufacture, see section 6416(b)(3) and § 48.6416 (b)-3.

(6) *Specified use of tires, inner tubes and certain receiving sets*—(i) *In general.* This subparagraph has application only in respect of an article specified in section 6416(b)(3)(C) (a tire or inner tube taxable under section 4071, or an automobile radio or television receiving set taxable under section 4141) or in section 6416(b)(3)(D) (a radio receiving set or an automobile radio receiving set). Subject to the provisions of subdivision (ii) of this subparagraph, tax under chapter 32 paid to the United States on the sale of an article specified in section 6416(b)(3) (C) or (D) is considered to be an overpayment if such article is, after the original sale of such article by the manufacturer thereof, resold by any person to another manufacturer and such other manufacturer—

(*a*) In the case of an article specified in section 6416(b)(3)(C), sells such article on or in connection with, or with the sale of, a second article manufactured or produced by him, or

(*b*) In the case of an article specified in section 6416(b)(3)(D), uses such article as a component part of a second article manufactured or produced by him.

It is immaterial, for purposes of this subparagraph, whether such second article is or is not a taxable article under chapter 32.

(ii) *Additional requirement.* If the requirements of subdivision (i) of this subparagraph are met, this subparagraph, nevertheless, shall have application only if the second article is by any person—

(*a*) Exported to a foreign country or shipped to a possession of the United States (whether or not such second article was sold by the manufacturer thereof in the knowledge that such article would be so exported or shipped,

(*b*) Sold to a State or local government for the exclusive use of a State or local government,

(*c*) Sold to a nonprofit educational organization for its exclusive use, or

(*d*) Used or sold for use as supplies for vessels or aircraft.

The various terms used in (*a*), (*b*), (*c*), and (*d*) of this subdivision have the same meaning as when used in chapter 32 (see section 4221 (a), (d), and (e), and the regulations thereunder).

(iii) *General provisions.* An overpayment arises pursuant to this subparagraph only if the article specified in section 6416(b)(3) (C) or (D) constitutes a part of or is associated with the second article at the time the second article is exported, used, or sold, as provided in subdivision (ii) of this subparagraph.

(iv) *Cross references.* For provisions relating to who is deemed to have made the overpayment in respect of tires, inner tubes, and receiving sets sold taxpaid by the manufacturer thereof direct to another manufacturer who uses them as provided in this subparagraph, see section 6416(b)(3) and § 48.6416(b)-3. For provisions relating to overpayments in respect of certain uses of tires, inner tubes, and automobile radio and television receiving sets by the manufacturer thereof, see section 6416(b)(4) and § 48.6416(b)-4. For provisions relating to the credit allowable in respect of taxpaid tires, inner tubes, or automobile radio or television receiving sets sold on or in connection with, or with the sale of, another article taxable under chapter 32, see section 6416(c) and § 48.6416 (c)-1.

(7) *Diesel or special motor fuel resold, used otherwise than for certain prescribed purposes, or used on a farm*—(i) *Diesel fuel and special motor fuel resold or used otherwise than in a diesel-powered highway vehicle, motor vehicle, motorboat, or airplane.* Tax under section 4041 (a)(1) or (b)(1) paid to the United States on the sale of diesel fuel or special motor fuel is considered to be an overpayment if such fuel—

(*a*) In the case of diesel fuel, is resold or is used otherwise than as fuel in a diesel-powered highway vehicle, or

(*b*) In the case of special motor fuel, is resold or is used otherwise than as fuel for the propulsion of a motor vehicle, motorboat, or airplane.

The principles set forth in § 48.4041-6, relating to dual use of diesel or special motor fuel, for determining whether liability is incurred under section 4041 at the time of sale of the fuel are equally applicable in determining whether an overpayment arises pursuant to the provisions of this subparagraph. Thus, if diesel fuel or special motor fuel used in a separate motor is drawn from the same tank as the one which supplies fuel for the propulsion of the vehicle, a reasonable determination of the quantity of such fuel used in such separate motor will be acceptable for purposes of computing the overpayment under this subparagraph. Such determination must be based, however, on the operating experience of the person using such fuel, and a statement, signed by such person, evidencing such operating experience must be maintained as a part of the records of the person claiming the refund or credit.

(ii) *Diesel fuel or special motor fuel used on a farm for farming purposes*—(*a*) *In general.* Tax under section 4041 paid to the United States in respect of diesel fuel used as a fuel in a diesel-powered highway vehicle, or in respect of special motor fuel used as a fuel for the propulsion of a motor vehicle, motorboat, or airplane, is considered to be an overpayment, if such fuel is so used on a farm for farming purposes. The provisions of section 6420(c) (1), (2), and (3), and the regulations thereunder, are applicable in determining whether such fuel is used on a farm for farming purposes.

(*b*) *Used by person other than owner, tenant, or operator.* Pursuant to the provisions of section 6420(c)(3)(A), relating to the meaning of the term "farming purposes", diesel fuel or special motor fuel used on a farm situated in the United States, for the purposes specified in such provisions, by a person other than the owner, tenant, or operator of such farm shall be considered to be used by the owner, tenant, or operator of the farm for "farming purposes". In such case, the owner, tenant, or operator of the farm on which such diesel fuel or special motor fuel is used by such other person shall be considered, pursuant to the provisions of section 6420(c)(3)(A), to be the person who paid the tax under section 4041, if any, in respect of such fuel. Inasmuch as the owner, tenant, or operator is considered to be the person who paid the tax, if any, in respect of such diesel fuel or special motor fuel, such owner, tenant, or operator is authorized to claim refund of any overpayment, within the meaning of this subparagraph, of tax under section 4041 in respect of such fuel. Any claim for refund filed by such owner, tenant, or operator for refund of such tax shall be filed with the district director for the district in which he files his income tax returns.

(iii) *Fuel lost or destroyed.* Diesel fuel or special motor fuel lost or destroyed through spillage, fire, or other casualty is not considered to have been "used" within the meaning of this subparagraph, and, accordingly, no refund or credit of tax paid on the sale of such fuel may be made.

(8) *Diesel or special motor fuel used in transit service.* If diesel fuel or special motor fuel in respect of which tax under section 4041 has been paid to the United States at the rate of 3 cents or 4 cents a gallon is used by any person during any calendar quarter—

(i) In vehicles while engaged in furnishing scheduled common carrier public passenger land transportation service along regular routes, and

(ii) The 60-percent passenger fare revenue test set forth in section 6421 (b)(2) (see paragraph (b) of § 48.6421 (b)-1) is met by such person for such quarter,

a portion of the tax paid in respect of such fuel is considered to be an overpayment. The amount of an overpayment, within the meaning of this subparagraph, in respect of such fuel used in a particular calendar quarter is computed—

(iii) By multiplying the number of gallons of such fuel so used in the calendar quarter on which tax was paid at the rate of 3 cents a gallon by 1 cent and by multiplying the number of gallons of such fuel so used in the calendar quarter on which tax was paid at the rate of 4 cents a gallon by 2 cents, and by multiplying the sum of these two products by

(iv) The percentage which the commuter fare revenue derived from such scheduled service during such calendar quarter was of the total passenger fare revenue not including the tax imposed by section 4261 on the amount paid for the transportation of persons derived from such scheduled service during such quarter.

Where the fuel on hand consists of fuel on which tax was paid under section 4041 at the rate of 3 cents a gallon and fuel on which tax was paid under section 4041 at the rate of 4 cents a gallon, such fuel shall be considered used in the order in which purchased. The term "tax exempt passenger fare revenue" shall be substituted for the term "commuter fare revenue", as used in subdivision (iv) of this subparagraph, in the case of fuel used prior to November 16, 1962. The change from the term "tax exempt passenger fare revenue" to "commuter fare revenue", effective with respect to fuel used on or after November 16, 1962, is merely a change in terminology and does not effect any change in the concept of the passenger fare revenue contemplated by either term. For definitions of these terms, as used in section 6416(b)(2)(H) and this subparagraph, see § 48.6421(d)-1. Whether the 60-percent passenger fare revenue test is met for purposes of this subparagraph is determined in the same manner as that provided in paragraph (b) of § 48.6421(b)-1. For other provisions relating to diesel fuel and special motor fuel, see subparagraphs (7), (9), and (10) of this paragraph.

(9) *Diesel fuel used in highway vehicle not registered for highway use or in highway vehicle owned by United States.* If diesel fuel in respect of which tax under section 4041(a)(1) has been paid to the United States at the rate of 3 cents or 4 cents a gallon is used as a fuel in a diesel-powered highway vehicle which—

(i) Is not registered, and is not required to be registered, at the time of such use, for highway use under the laws of any State or foreign country, or

(ii) Is owned by the United States and is not used on the highway,

a portion of the tax paid in respect of such fuel is considered to be an overpayment. The amount of an overpayment, within the meaning of this subparagraph, in respect of diesel fuel which meets the applicable conditions prescribed in the preceding sentence is the sum of the two products obtained by multiplying the number of gallons of such fuel on which tax was paid at the rate of 3 cents a gallon by 1 cent and by multiplying the number of gallons of such fuel on which tax was paid at the rate of 4 cents a gallon by 2 cents. Where the fuel on hand consists of fuel on which tax was paid under section 4041(a)(1) at the rate of 3 cents a gallon and fuel on which tax was paid under section 4041(a)(1) at the rate of 4 cents a gallon, such fuel shall be considered used in the order in which purchased. The terms "highway vehicle," "highway," and "registered," as used in this subparagraph, have the same meaning as when used in § 48.4041-7, relating to definitions applicable in respect of tax imposed under section 4041. This subparagraph has no application in respect of diesel fuel resold by the purchaser or used on a farm for farming purposes. For provisions relating to refund or credit in respect of diesel fuel resold or used on a farm for farming purposes, see subparagraph (7) of this paragraph.

(10) *Special motor fuel used for taxable purposes otherwise than in highway vehicle registered for highway use, or used in highway vehicle owned by United States.* If special motor fuel in respect of which tax under section 4041(b)(1) has been paid to the United States at the rate of 3 cents or 4 cents a gallon is used as a fuel for the propulsion of a—

(i) Motorboat,

(ii) Airplane,

(iii) A motor vehicle which is not a highway vehicle,

(iv) A motor vehicle which is a highway vehicle (other than a highway vehicle owned by the United States) and which, at the time of such use, is not registered, and is not required to be registered, for highway use under the laws of any State or foreign country, or

(v) A highway vehicle owned by the United States which is not used on the highway,

a portion of the tax paid in respect of such fuel is considered to be an overpayment. The amount of an overpayment, within the meaning of this subparagraph, in respect of special motor fuel which meets the applicable conditions prescribed in the preceding sentence is the sum of the two products obtained by multiplying the number of gallons of such fuel on which tax was paid at the rate of 3 cents a gallon by 1 cent and by multiplying the number of gallons of such fuel on which tax was paid at the rate of 4 cents a gallon by 2 cents. Where the fuel on hand consists of fuel on which tax was paid under section 4041(b)(1) at the rate of 3 cents a gallon and fuel on which tax was paid under section 4041(b)(1) at the rate of 4 cents a gallon, such fuel shall be considered used in the order in which purchased. The terms "highway vehicle", "highway", and "registered", as used in this subparagraph, have the same meaning as when used in § 48.4041-7, relating to definitions applicable in respect of tax imposed under section 4041. This subparagraph has no application in respect of special motor fuel resold by the purchaser or used on a farm for farming purposes. For provisions relating to refund or credit in respect of special motor fuel resold or used on a farm for farming purposes, see subparagraph (7) of this paragraph.

(11) *Farm equipment.* Tax under section 4061(b) paid to the United States on the sale of parts or accessories (other than spark plugs and storage batteries) for any article taxable under section 4061(a) (relating to automobiles, trucks, etc.), is considered to be an overpayment, if such parts or accessories are used, or are sold by any person for use by the purchaser, as repair or replacement parts, or as accessories, for farm equipment. The term "farm equipment", as used in this subparagraph, does not include any article taxable under section 4061(a). The term "parts or accessories", as used in this subparagraph, has the same meaning as when used in the regulations under section 4061(b). This subparagraph has no application in any case where refund or credit of tax paid on the sale of parts or accessories is allowable under section 6416(b)(3) (see § 48.6416(b)-3), relating, in part, to parts and accessories purchased tax-paid from the manufacturer thereof by a second manufacturer and used by the second manufacturer in further manufacture of a taxable or nontaxable article.

(12) *Tread rubber.* Tax under section 4071(a)(4) paid to the United States on the sale of tread rubber which is used, or which is sold by any person for use by the purchaser, otherwise than in the recapping or retreading of tires of the type used on highway vehicles is considered to be an overpayment. In the case of tread rubber which is used in the recapping or retreading of tires, the type of vehicle on which the recapped or retreaded tire is to be used or the actual or intended use of the recapped or retreaded tire is immaterial in determining whether an overpayment arises pursuant to this subparagraph. The controlling factor is whether the tire resulting from the recapping or retreading is of a type which is not used on a highway vehicle. The terms "tread rubber", "tires of the type used on highway vehicles", and "tires", as used in this subparagraph, have the same meaning as when used in section 4072 and § 48.4072-1. This subparagraph has no application as to tread rubber in respect of which an overpayment arises pursuant to the provisions of section 6416(b)(3) (see § 48.6416(b)-3), relating in part, to articles purchased tax-paid from the manufacturer thereof by a second manufacturer and used in further manufacture of a taxable article.

(13) *Gasoline used in production of special motor fuels.* Tax under section 4081 paid to the United States on the sale of gasoline is considered to be an overpayment, if such gasoline is used or sold for use in the production of a special motor fuel. The term "special motor fuel", as used in this subparagraph, has the same meaning as when used in paragraph (f) of § 48.4041-7.

(14) *Oil used for nonlubricating purposes*—(i) *In general.* Tax under section 4091 paid to the United States on the sale of lubricating oil is considered to be an overpayment if such oil is by any person used or sold for nonlubricating purposes. For provisions relating to overpayment of tax in respect of lubricating oil used or sold for use as cutting oil, see subparagraph (15) of this paragraph.

(ii) *Containers of 1 gallon or less.* An overpayment within the meaning of subdivision (i) of this subparagraph is considered to exist in respect of lubricating oil, sold tax-paid by the manufacturer thereof in bulk or in containers of more than 1 gallon, which is, by any purchaser thereof, packaged in containers of 1 gallon or less furnished by him and labeled by him to indicate use of the oil for nonlubricating purposes only, provided—

(*a*) Any advertising of such oil so packaged and labeled indicates that the oil is for nonlubricating use only, and

(*b*) The oil so packaged and labeled is sold to a purchaser for nonlubricating use by him or for resale by him for such use.

(15) *Cutting oils*—(i) *In general.* In the case of tax under section 4091 paid at the rate of 6 cents a gallon on the sale of lubricating oil, such portion of the tax paid as does not exceed 3 cents a gallon of such oil is considered to be an overpayment, if such oil is by any person used or sold for use as cutting oil. For purposes of this subdivision, lubricating oil is considered to have been used or sold for use as cutting oil, if such oil is used or sold for use in cutting and machining operations (including, but not limited to, forging, drawing, rolling, shearing, punching, and stamping) on metals. See section 4092(b) and paragraph (b) of § 48.4092-1 for definition of the term "cutting oils".

(ii) *Containers of 1 gallon or less.* An overpayment within the meaning of subdivision (i) of this subparagraph is considered to exist in respect of lubricating oil, sold tax-paid by the manufacturer thereof in bulk or in containers of more than 1 gallon, which is, by any purchaser thereof, packaged in containers of 1 gallon or less furnished by him and labeled by him to indicate use of the oil only in cutting and machining operations on metals, provided—

(*a*) Any advertising of such oil so packaged and labeled indicates that the oil is for use in such cutting and machining operations only, and

(*b*) The oil so packaged and labeled is sold to a purchaser for such use by him or for resale by him for such use.

(16) *Musical instruments sold to religious institutions.* Tax under section 4151 paid to the United States on the sale of any musical instrument is considered to be an overpayment, if the musical instrument is by any person sold to a religious institution for exclusively religious purposes. Those provisions of the regulations applicable under section 4221(e)(3) which relate to the qualification of an organization as a religious institution for purposes of such section have application also for purposes of this subparagraph.

(17) *Unexposed motion picture film.* Tax under section 4171 paid to the United States on the sale of unexposed motion picture film is considered to be

an overpayment, if such film is by any person used or sold for use by the purchaser in the making of newsreel motion picture films. The term "making of newsreel motion picture films", as used in this subparagraph, means the production of newsreel motion pictures covering current news events for immediate release for public exhibition.

(c) *Refund or credit of overpayments within the meaning of section 6416(b)(2)*—(1) *Manufacturers taxes under chapter 32*—(i) *Evidence to be submitted by claimant.* Refund or credit of an overpayment, within the meaning of section 6416(b)(2) and paragraph (b) of this section, of tax under chapter 32 shall not be allowed unless there is submitted, in support of the claim for refund or credit, the evidence required under paragraph (d)(2) of § 48.6416(a)-1, and a statement, signed by the person who paid the tax to the United States—

(*a*) Showing the amount claimed in respect of each category of uses, sales, or resales on which the claim is based and which give rise to a right of refund or credit under section 6416(b)(2) and paragraph (b) of this section,

(*b*) Showing that he has in his possession evidence—

(*1*) Identifying the article, both as to nature and quantity, in respect of which refund or credit is claimed; and

(*2*) Showing the amount of tax paid to the United States in respect of such article or articles and the dates of payment;

(*c*) In the case of an overpayment determined under section 6416(b)(2)(A) and paragraph (b)(1) of this section in respect of an article taxable under section 4061(a), an article taxable under section 4111, an article taxable under section 4121, or an article taxable under section 4141, showing that, pursuant to section 6416(g), he had in his possession at the time of his shipment of the article or at the time title to the article passed to his vendee, whichever is earlier, evidence that the article was to be exported to a foreign country or shipped to a possession of the United States,

(*d*) In the case of any overpayment other than an overpayment determined under section 6416(b)(2)(F) and paragraph (b)(6) of this section, showing that he has in his possession evidence that the article has been exported, or has been used, sold, or resold in a manner or for a purpose which gives rise to an overpayment within the meaning of section 6416(b)(2) and paragraph (b) of this section, and

(*e*) In the case of an overpayment determined under section 6416(b)(2)(F) and paragraph (b)(6) of this section, relating to a tire, inner tube, or receiving set sold on or in connection with, or as a component part of, a second article which has been exported, or which has been used or sold in a manner or for a purpose specified in such section 6416(b)(2)(F) and such paragraph (b)(6), showing that he has in his possession (*1*) evidence that the second article has been exported, or has been so used or sold, and (*2*) a statement, executed and signed by the ultimate purchaser of the tire, inner tube, or receiving set, showing that he purchased such tire, inner tube, or receiving set from a person other than the person who paid the tax on the sale of such tire, inner tube, or receiving set.

(ii) *Evidence required to be in possession of claimant*—(*a*) *Evidence required under subdivision (i)(d) of this subparagraph*—(*1*) *In general.* The evidence required to be in the possession of the person who paid the tax, as provided in subdivision (i)(*d*) of this subparagraph, shall, in the case of an article exported, consist of proof of exportation in the form prescribed in the regulations applicable under section 4221, and, in the case of other articles sold tax-paid by such person, shall consist of a certificate, executed and signed by the ultimate purchaser of the article, in the form prescribed in (*3*) of this subdivision (ii)(*a*). However, in any case where the article to which the claim relates passed through a chain of sales from the person who paid the tax to the ultimate purchaser, such evidence may consist of a certificate, executed and signed by the ultimate vendor of the article, in the form provided in (*4*) of this subdivision (ii)(*a*), rather than the proof of exportation itself or the certificate of the ultimate purchaser. This subdivision (*1*) has no application in any case where the claim is for refund or credit of an overpayment determined under section 6416(b)(2)(N) and paragraph (b)(14) of this section, or under section 6416(b)(2)(O) and paragraph (b)(15) of this section, in respect of oil packaged in containers of 1 gallon or less and sold or resold for use for nonlubricating purposes or for use as cutting oil, as the case may be.

(*2*) *Oil packaged in containers of 1 gallon or less.* In the case of lubricating oil sold tax-paid by the manufacturer thereof in bulk or in containers of more than 1 gallon, which is, by any purchaser thereof, packaged in containers of 1 gallon or less furnished by him and labeled by him to indicate use of the oil for nonlubricating purposes or as cutting oil, as the case may be, the evidence required to be in the possession of the person who paid the tax, as provided in subdivision (i)(*d*) of this subparagraph, shall consist of a statement, executed and signed by the person who packaged the oil, showing that the oil was so packaged and labeled, that any advertising of such oil so packaged and labeled indicated that the oil was for such use only, and that the oil so packaged and labeled was sold to a purchaser for such use by him or for resale by him for such use.

(*3*) *Certificate of ultimate purchaser.* The certificate executed and signed by the ultimate purchaser of the article to which the claim relates shall identify the article, both as to nature and quantity; show the address of the ultimate purchaser of the article, the name and address of the ultimate vendor of the article; and describe the use actually made of the article in sufficient detail to establish that refund or credit is due, except that the use to be made of the article shall be described in lieu of actual use in any case where refund or credit is claimed by reason of the sale or resale of an article for a specified use which gives rise to an overpayment under paragraph (b) of this section. In any case where the certificate sets forth the use to be made of any article, in lieu of describing the actual use thereof, the certificate shall show that the ultimate purchaser has agreed to notify the person claiming refund or credit in the event that such article is not used as specified in such certificate. Such certificate shall also contain a statement that the ultimate purchaser understands that he and all guilty parties may, for fraudulent use of such certificate, be subject to a fine of not more than $10,000, or imprisonment for not more than 5 years, or both, together with the costs of prosecution. A purchase order, provided that all of the information required by this subdivision (ii)(*a*)(*3*) is included therein, is acceptable in lieu of a separate certificate of ultimate purchaser.

(*4*) *Certificate of ultimate vendor.* Any certificate executed and signed by an ultimate vendor as evidence to be retained in the possession of the person who paid the tax, as provided in subdivision (i)(*d*) of this subparagraph, may be executed with respect to any one or more overpayments by such person which arose under section 6416(b)(2) and paragraph (b) of this section by reason of exportations, uses, or resales occurring within any period of not more than 4 calendar quarters, beginning and ending dates of such period to be specified in the certificate. The certificate shall be in substantially the following form:

STATEMENT OF ULTIMATE VENDOR

(For use in claiming refund or credit of overpayment determined under section 6416(b)(2) (other than section 6416(b)(2)(F)), Internal Revenue Code.)

The undersigned or the

(Name of ultimate vendor if other than undersigned)

of which he is ----------, is the ultimate
(Title)
vendor of the article specified below or on the reverse side hereof.

Such article was purchased by the ultimate vendor tax-paid and was thereafter exported, used, or sold as indicated below or on the reverse side hereof.

The ultimate vendor has in his possession

(Proof of exportation in respect of the article or a certificate as to use executed by the ultimate purchaser of the article)

The ----------------------------------
(Proof of exportation or certificate)
(1) is retained by the ultimate vendor, (2) will, upon request, be forwarded to

----
(Name of person who paid tax to United States)
at any time within 3 years from the date of this statement for use by such person in establishing that refund or credit is due in respect of such article, and (3) will otherwise be held by the ultimate vendor for such 3-year period.

According to the best knowledge and belief of the undersigned, no statement in respect of such ------------------------------ has
(Proof of exportation or certificate)

previously been executed, and he understands that the fraudulent use of this statement may subject him and all guilty parties to a fine of not more than $10,000, or imprisonment for not more than 5 years, or both, together with the costs of prosecution.

(Signature)

(Address)

(Date)

Vendor's invoice	Articles	Date of resale	Quantity	Exported or use made or to be made (specify)

(*b*) *Evidence required under subdivision (i)(e) of this subparagraph—(1) In general.* The evidence required to be in the possession of the person who paid the tax, as provided in subdivision (i)(*e*)(*1*) of this subparagraph, shall, in the case of an exportation of the second article (as referred to in such subdivision (i)(*e*)), consist of proof of exportation of the second article in the form prescribed in the regulations applicable under section 4221, and, in other cases, shall consist of a certificate, executed and signed by the ultimate purchaser of the second article, in the form prescribed in (*2*) of this subdivision (ii)(*b*). However, such evidence may consist of a certificate, to be executed and signed by the ultimate vendor of the second article in the form provided in (*3*) of this subdivision (ii)(*b*), rather than the proof of exportation of the second article or the certificate of the ulitmate purchaser of the second article.

(*2*) *Certificate of ultimate purchaser of second article.* The certificate of the ultimate purchaser of the second article shall contain the same information as that required in subdivision (ii)(*a*)(*3*) of this subparagraph, except that such information shall be furnished in respect of such second article, rather than the article to which the claim relates.

(*3*) *Certificate of ultimate vendor of second article.* Any certificate executed and signed by an ultimate vendor, as evidence to be retained in the possession of the person who paid the tax, as provided in subdivision (i)(*e*)(*1*) of this subparagraph, may be executed with respect to any one or more overpayments by such person which arose under section 6416(b)(2)(F) and paragraph (b)(6) of this section by reason of exportations, uses, or resales of a second article occurring within any period of not more than 4 calendar quarters, beginning and ending dates of such period to be specified in the certificate. The certificate shall be in substantially the following form:

STATEMENT OF ULTIMATE VENDOR

(For use in claiming refund or credit of overpayment determined under section 6416(b)(2)(F), Internal Revenue Code, involving tires, inner tubes, or receiving sets sold on or with another article.)

The undersigned, or the

(Name of ultimate vendor of second article if other than undersigned)

of which he is----------, is the ultimate
(Title)

vendor of an article, specified below or on the reverse side hereof, on which or with which a tax-paid tire, inner tube, or receiving set was sold.

The ultimate vendor has in his possession

(Proof of exportation in respect of the article on which or with which the tire, inner tube, or receiving set was sold, or a certificate as to use of such article executed by the ultimate purchaser of such article)

The --
(Proof of exportation or certificate)

(1) is retained by the ultimate vendor, (2) will, upon request, be forwarded to

(Name of person who paid tax to United States on the tire, inner tube, or receiving set)

at any time within 3 years from the date of this statement for use by such person in establishing that refund or credit is due in respect of such tire, inner tube, or receiving set, and (3) will otherwise be held by the ultimate vendor for such 3-year period.

According to the best knowledge and belief of the undersigned, no statement in respect of such ------------------------------ has
(Proof of exportation or certificate)

previously been executed, and he understands that the fraudulent use of this statement may subject him and all guilty parties to a fine of not more than $10,000, or imprisonment for not more than 5 years, or both, together with the costs of prosecution.

(Signature)

(Address)

(Date)

Tires, inner tubes, or receiving sets (specify and state quantity)	Vendor's invoice on second article	Second article (specify and state quantity)	Date of sale of second article	Exported or use made or to be made (specify in respect of second article)

(*c*) *Repayment or consent of ultimate vendor.* If the person claiming refund or credit of an overpayment has repaid or agreed to repay the amount of the overpayment to the ultimate vendor or if the ultimate vendor consents to the allowance of the refund or credit (see paragraph (d)(2) of § 48.6416(a)-1), a statement to that effect, signed by the ultimate vendor, may be shown on, or made a part of, the evidence required to be retained in the possession of the person claiming the refund or credit, as provided in subdivision (i)(*d*) or (i)(*e*)(*1*) of this subparagraph.

(2) *Diesel and special motor fuel taxes under section 4041—*(i) *Evidence to be submitted by claimant—*(*a*) *In general.* Refund or credit of an overpayment, within the meaning of section 6416(b)(2) and paragraph (b) of this section, of tax under section 4041 shall not be allowed unless there is submitted, in support of the claim for refund or credit, the evidence required under paragraph (c)(2) of § 48.6416(a)-1, and a statement, signed by the person who paid the tax to the United States—

(*1*) Showing the amount claimed in respect of each category of uses, sales, and resales on which the claim is based and which give rise to a right of refund or credit under section 6416(b)(2) and paragraph (b) of this section,

(*2*) Showing that such person has in his possession evidence—

(*i*) Identifying the fuel, both as to nature and quantity, in respect of which refund or credit is claimed;

(*ii*) Showing the amount of tax paid to the United States in respect of such fuel and the dates of payment;

(*iii*) Showing that such fuel has been exported, or has been used, sold, or resold, as provided in section 6416(b)(2) and paragraph (b) of this section, except that, in the case of fuel used in transit service (see section 6416(b)(2)(H) and paragraph (b)(8) of this section), such person shall submit a statement, executed and signed by the person who used the fuel, showing the computation (by calendar quarters) of the amount of the refund or credit, the computation to be made in the same form and manner as that prescribed in paragraph (b)(2)(ii) of § 48.6421(c)-1, relating to gasoline used in transit service. This subdivision (i)(*a*) has no application in any case where the claim is for refund or credit of an overpayment determined under section 6416(b)(2)(G) and paragraph (b)(7)(ii) of this section in respect of fuel used on a farm for farming purposes by a person other than the owner, tenant, or operator of such farm.

(*b*) *Fuel used on a farm for farming purposes by a person other than the owner, tenant, or operator of the farm.* Any claim filed by an owner, tenant, or operator of a farm for refund or credit of an overpayment determined under section 6416(b)(2)(G) and paragraph (b)(7)(ii) of this section, in respect of diesel fuel or special motor fuel used on a farm for farming purposes by a person other than the owner, tenant, or operator of the farm, shall not be allowed unless such owner, tenant, or operator submits in support of such claim a statement showing the name and address of the person who so used the fuel; the date or dates on which such fuel was so used; the place where the fuel was so used; a description of the services in connection with which such fuel was so used (for example, filling a silo, harvesting wheat, dusting crops, etc.); the number of gallons of such fuel used by such person as fuel in a diesel-powered highway vehicle, or as a fuel for the propulsion of a motor vehicle, motorboat, or airplane, while performing such services; and the rate at which tax was paid in respect of such fuel.

(ii) *Evidence required to be in possession of claimant.* The evidence required to be in the possession of the person who paid the tax, as provided in subdivision (i) (*a*) (*3*) of this subparagraph, shall, in the case of fuel exported, consist of proof of exportation, and, in the case of other fuel sold tax-paid, shall consist of a certificate executed and signed by the person who purchased the fuel in a resale or for the use which gave rise to the overpayment. The certificate shall identity the fuel, both as to nature and quantity, in respect of which refund or credit is claimed; shall show the address of such purchaser; shall show the name and address of the person from whom the fuel was purchased and the date or dates on which the fuel was purchased; and shall show that the fuel was resold and the date of the resale, or, if the claim is not based on resale of the fuel, shall describe the use actually made of the fuel in sufficient detail to establish that refund or credit is due, except that the use to be made of the fuel shall be described in lieu of actual use in any case where refund or credit is claimed by reason of the sale of the fuel for a specified use which gives rise to an overpayment under paragraph (b) of this section. However, in any case where the use to be made of the fuel is described in lieu of actual use, the certificate shall show that the purchaser has agreed to notify the person claiming refund or credit in the event that such fuel is not used as specified in such certificate. Such certificate shall also contain a statement that the purchaser has not previously executed such a certificate in respect of such fuel, and that he understands that he and all guilty parties may, for fraudulent use of such certificate, be subject to a fine of not more than $10,000, or imprisonment for not more than 5 years, or both, together with the costs of prosecution.

(3) *Effective date.* This paragraph has application only in respect of claims filed on or after July 1, 1963.

§ 48.6416(b)–3 Articles sold tax-paid by manufacturer thereof to another manufacturer for specified use.

(a) *In general.* Section 6416(b)(3) and paragraph (b) of this section provide that under certain circumstances tax under chapter 32 (manufacturers excise tax) paid to the United States on the sale of an article by the manufacturer thereof direct to a second manufacturer who uses the article in further manufacture of a second article or sells the article with or as a part of a second article manufactured or produced by him shall be deemed to be an overpayment. Any overpayment of tax within the meaning of section 6416(b)(3) and paragraph (b) of this section is deemed to have been made by the second manufacturer, and such second manufacturer may file claim for refund of any such overpayment or may claim credit for the overpayment on any return of tax under chapter 32 which he subsequently files. Any such claim for refund shall be filed with the district director for the distict in which such second manufacturer files his returns of tax under chapter 32, or would file such returns if required. No interest shall be allowed on any refund or credit of an overpayment determined under section 6416(b)(3) and paragraph (b) of this section. For provisions relating to the evidence required in support of a claim for refund or credit of such an overpayment, see § 301.6402–2 of this chapter (Regulations on Procedure and Administration) and paragraph (c) of this section. For provisions authorizing the taking of a credit in lieu of filing a claim for refund, see section 6416(f) and § 48.6416(f)–1.

(b) *Conditions relating to use of article*—(1) *Used in further manufacture*—(i) *General rule.* Except as otherwise provided in subdivision (ii) of this subparagraph, tax under chapter 32 paid to the United States on the sale of an article by the manufacturer thereof to a second manufacturer is considered to be an overpayment if—

(*a*) The tax-paid article is used by the second manufacturer as material in the manufacture or production of, or as a component part of, a second article manufactured or produced by him, and

(*b*) The second article is an article which is taxable under chapter 32.

It is immaterial for purposes of this subdivision whether the second article is sold or otherwise disposed of, or if sold, whether the sale is a taxable sale.

(ii) *Exceptions to general rule*—(*a*) *Articles referred to in section 6416*(b) (3) (*B*) *and* (*E*). Subdivision (i) (*b*) of this subparagraph has no application in respect of any article specified in section 6416(b)(3)(B) (a part or accessory taxable under section 4061(b), a radio or television component taxable under section 4141, or a camera lens taxable under section 4171), or section 6416(b)(3)(E) (a bicycle tire, as defined in section 4221 (e)(4)(B), or an inner tube for such a tire). Accordingly, in the case of any article specified in section 6416(b)(3) (B), if the condition prescribed in subdivision (i) (*a*) of this subparagraph is met, it is immaterial whether the second article is or is not an article taxable under chapter 32. In the case of an article specified in section 6416(b)(3)(E), tax paid on the sale by the manufacturer thereof will be considered to be an overpayment, if the condition prescribed in subdivision (i) (*a*) of this subparagraph is met and the article is used by the second manufacturer as material in the manufacture or production of, or as a component part of, a bicycle other than a rebuilt or reconditioned bicycle, but only if the sale of the article by the manufacturer thereof occurred on or after May 1, 1960.

(*b*) *Gasoline.* Subdivision (i) (*b*) of this subparagraph has no application in the case of gasoline taxable under section 4081 which is sold by the manufacturer on or after October 1, 1961, and which is used by a second manufacturer, for nonfuel purposes, as a material in the manufacture or production of any other article manufactured or produced by him. For provisions relating to use for nonfuel purposes, see section 4221 and the regulations thereunder contained in Subpart N.

(*c*) *Articles to which this subparagraph is inapplicable.* This subparagraph has no application in respect of a tire or inner tube taxable under section 4071 (other than a bicycle tire or tube used as provided in section 6416(b)(3) (E)) or an automobile radio or television receiving set taxable under section 4141.

(iii) *Article broken or rendered useless.* Any article to which this subparagraph has application (other than a bicycle tire or tube used as provided in section 6416(b)(3)(E)) which would have been used in the manufacture or production of a second article, except for the fact that it was broken or rendered useless in the process of the manufacture or production of such second article, shall be considered to have been used as a component part of such second article.

(iv) *Cross reference.* For provisions relating to refund or credit in respect of articles sold tax-paid by the manufacturer thereof and resold by any person to another manufacturer who uses them as provided in this subparagraph, see section 6416(b)(2)(E) and paragraph (b)(5) of § 48.6416(b)–2.

(2) *Specified use of tires, inner tubes, and certain receiving sets*—(i) *In general.* This subparagraph has application only in respect of an article specified in section 6416(b)(3)(C) (a tire or inner tube taxable under section 4071, or an automobile radio or television receiving set taxable under section 4141) or in section 6416(b)(3)(D) (a radio receiving set or an automobile radio receiving set). Subject to the provisions of subdivision (ii) of this subparagraph, tax under chapter 32 paid to the United States on the sale of an article specified in section 6416(b)(3)(C) or (D) by the manufacturer thereof to a second manufacturer is considered to be an overpayment if—

(*a*) In the case of an article specified in section 6416(b)(3)(C), the article is sold by the second manufacturer on or in connection with, or with the sale of, a second article manufactured or produced by him, or

(*b*) In the case of an article specified in section 6416(b)(3)(D), the article is used by the second manufacturer as a component part of a second article manufactured or produced by him.

It is immaterial for purposes of this subparagraph whether such second article is or is not a taxable article under chapter 32.

(ii) *Additional requirement.* If the requirements of subdivision (i) of this subparagraph are met, this subparagraph, nevertheless, shall have application only if the second article is by any person—

(*a*) Exported to a foreign country or shipped to a possession of the United States (whether or not such second article was sold by the manufacturer thereof in the knowledge that such article would be so exported or shipped);

(*b*) Sold to a State or local government for the exclusive use of a State or local government;

(*c*) Sold to a nonprofit educational organization for its exclusive use; or

(*d*) Used or sold for use as supplies for vessels or aircraft.

The various terms used in (*a*), (*b*), (*c*), and (*d*) of this subdivision have the same meaning as when used in chapter 32 (see section 4221 (a), (d), and (e), and the regulations thereunder).

(iii) *General provisions.* An overpayment arises pursuant to this subparagraph only if the article specified in section 6416(b)(3) (C) or (D) constitutes a part of or is associated with the second article at the time the second article is exported, used, or sold, as provided in subdivision (ii) of this subparagraph.

(iv) *Cross references.* For provisions relating to refund or credit in respect of tires, inner tubes, or receiving sets sold tax-paid by the manufacturer thereof and resold by any person to another manufacturer who uses them as provided in this subparagraph, see section 6416(b)(2)(F) and paragraph (b)(6) of § 48.6416(b)–2. For provisions relating to refund or credit in respect of tires, inner tubes, or receiving sets used by the manufacturer thereof as provided in this subparagraph, see section 6416(b)(4) and § 48.6416(b)–4. For provisions relating to the credit allowable in respect of tax-paid tires, inner tubes, or automobile radio or television receiving sets sold on or in connection with, or with the sale of, another article taxable under chapter 32, see section 6416(c) and § 48.6416(c)–1.

(3) *Specified use must occur prior to any other use.* This paragraph has application only in those cases where the exportation, use, or sale (or any combination thereof) referred to in subparagraph (1) or (2) of this paragraph occurs before any other use. In the case of any article which is sold for a use described in subparagraph (2) of this paragraph and is not so used, such subparagraph shall become inapplicable *ab initio.*

(c) *Refund or credit of overpayments within the meaning of section 6416(b)(3)*—(1) *Evidence to be submitted by claimant.* Refund or credit of an overpayment, within the meaning of section 6416(b)(3) and paragraph (b) of this section, shall not be allowed unless there is submitted, in support of the claim for refund or credit, a statement, signed by the person making such claim—

(i) Showing the amount claimed in respect of each category of uses, sales, and resales on which the claim is based and which give rise to a right of refund or credit under section 6416(b)(3) and paragraph (b) of this section,

(ii) Showing that the articles in respect of which refund or credit is claimed were purchased direct from the manufacturer by the person claiming refund or credit,

(iii) Showing that such person has in his possession evidence—

(*a*) Identifying the article, both as to nature and quantity, in respect of which refund or credit is claimed;

(*b*) Showing the name and address of the manufacturer of such article;

(*c*) Showing the amount of tax paid in respect of such articles by the manufacturers thereof and the dates of payment;

(*d*) Showing that such article was used by such person as material in the manufacture or production of, or as a component part of, a second article manufactured by him, or was sold on or in connection with, or with the sale of, a second article manufactured or produced by him; and

(*e*) Identifying the second article, both as to nature and quantity,

(iv) In the case of an overpayment determined under section 6416(b)(3) (C) or (D) and paragraph (b)(2) of this section, (*a*) showing that such person has in his possession evidence that such second article has been exported, or has been used or sold as provided in such section 6416(b)(3) (C) or (D) and such paragraph (b)(2), and (*b*) furnishing the evidence required under paragraph (d)(2) of § 48.6416(a)–1.

(2) *Evidence required under subparagraph (1)(vi)(a) of this paragraph to be in possession of claimant*—(i) *In general.* The evidence required under subparagraph (1)(vi)(*a*) of this paragraph to be in the possession of the person claiming refund or credit shall, in the case of an exportation of the second article (as referred to in such subparagraph (1)(vi)(*a*)), consist of proof of exportation of the second article in the form prescribed in the regulations applicable under section 4221, and, in other cases, shall consist of a certificate, executed and signed by the ultimate purchaser of the second article, in the form prescribed in subdivision (ii) of this subparagraph. However, in cases where the second article passed through a chain of sales from the manufacturer of the second article to the ultimate purchaser of the second article, such evidence may consist of a certificate, executed and signed by the ultimate vendor of the second article, in the form prescribed in subdivision (iii) of this subparagraph, rather than the proof of exportation of the second article or the certificate of the ultimate purchaser of the second article.

(ii) *Certificate of ultimate purchaser of second article.* The certificate of the ultimate purchaser of the second article shall contain the same information as that required in paragraph (c)(1)(ii)(*a*)(*3*) of § 48.6416(b)–2, except that such information shall be furnished in respect of such second article, rather than the article to which the claim relates.

(iii) *Certificate of ultimate vendor of second article.* Any certificate executed and signed by an ultimate vendor as evidence required under subparagraph (1)(vi)(*a*) of this paragraph to be retained in the possession of the person claiming refund or credit shall be executed in the same form and manner as that provided in paragraph (c)(1)(ii)(*b*)(*3*) of § 48.6416(b)–2.

(iv) *Repayment or consent of ultimate vendor.* If the person claiming refund or credit of an overpayment has repaid or agreed to repay the amount of the overpayment to the ultimate vendor or if the ultimate vendor consents to the allowance of the refund or credit (see paragraph (d)(2) of § 48.6416(a)–1), a statement to that effect, signed by the ultimate vendor, may be shown on, or made a part of, the evidence required to be retained in the possession of the person claiming the refund or credit, as provided in subparagraph (1)(vi)(*a*) of this paragraph.

(3) *Effective date.* This paragraph has application only in respect of claims filed on or after July 1, 1963.

§ 48.6416(b)–4 Tires, inner tubes, or certain receiving sets sold by the manufacturer thereof with or as a part of another article manufactured by him.

(a) *In general.* Section 6416(b)(4) and paragraph (b) of this section provide that under certain circumstances tax under chapter 32 (manufacturers excise tax) paid to the United States in respect of tires, inner tubes, or certain receiving sets used by the manufacturer thereof shall be deemed to be an overpayment by such manufacturer. Refund or credit of any overpayment of tax within the meaning of section 6416(b)(4) and this section may be claimed only by the person who paid the tax to the United States. No interest shall be allowed on any refund or credit of such overpayment. For provisions relating to the evidence required in support of a claim for refund or credit of such overpayment, see § 301.6402–2 of this chapter (Regulations on Procedure and Administration) and paragraph (c) of this section. For provisions authorizing the taking of a credit in lieu of filing a claim for refund, see section 6416(f) and § 48.6416(f)–1.

(b) *Conditions relating to use of article*—(1) *General rule.* Subject to the provisions of subparagraph (2) of this paragraph, tax under chapter 32 paid to the United States by a manufacturer in respect of—

(i) A tire or inner tube taxable under section 4071, or an automobile radio or television receiving set taxable under section 4141, manufactured by him and sold by him on or in connection with, or with the sale of, any other article manufactured or produced by him, or

(ii) A radio receiving set or an automobile radio receiving set manufactured by him and used by him as a component part of any other article manufactured or produced by him,

is considered to be an overpayment by the manufacturer of such tire, inner tube, or receiving set. For purposes of this subparagraph, it is immaterial whether the second article is or is not a taxable article under chapter 32.

(2) *Additional requirement.* If the requirements of subparagraph (1) of this paragraph are met, this paragraph nevertheless, shall have application only if the second article is by any person—

(i) Exported to a foreign country or shipped to a possession of the United States (whether or not such second article was sold by the manufacturer thereof in the knowledge that such article would be so exported or shipped),

(ii) Sold to a State or local government for the exclusive use of a State or local government,

(iii) Sold to a nonprofit educational organization for its exclusive use, or

(iv) Used or sold for use as supplies for vessels or aircraft.

The various terms used in subdivisions (i), (ii), (iii), and (iv) of this subparagraph have the same meaning as when used in chapter 32 (see section 4221 (a), (d), and (e) and the regulations thereunder).

(3) *General provisions.* An overpayment arises pursuant to this section only if the tire, inner tube, or receiving set constitutes a part of or is associated with the second article at the time the second article is exported, used, or sold as provided in subparagraph (2) of this paragraph.

(4) *Specified use must occur before any other use.* This section has application only in those cases where the exportation, use, or sale (or any combination thereof) referred to in this section occurs before any other use. In the case of any article which is sold for a use described in subparagraph (2) of this paragraph and is not so used, this section shall become inapplicable *ab initio.*

(5) *Cross references.* For provisions relating to refund or credit in respect of tires, inner tubes, or receiving sets sold tax-paid by the manufacturer thereof and resold by any person to another manufacturer who uses them as provided in this section, see section 6416(b)(2)(F) and paragraph (b)(6) of § 48.6416(b)-2. For provisions relating to refund or credit in respect of tires, inner tubes, or receiving sets sold tax-paid by the manufacturer thereof direct to another manufacturer who uses them as provided in this section, see section 6416(b)(3) and § 48.6416(b)-3. For provisions relating to the credit allowable in respect of tax-paid tires, inner tubes, or automobile radio or television receiving sets sold on or in connection with, or with the sale of, another article taxable under chapter 32, see section 6416 (c) and § 48.6416(c)-1.

(c) *Refund or credit of overpayments within the meaning of section 6416(b)(4)*—(1) *Evidence to be submitted by claimant.* Refund or credit of an overpayment, within the meaning of section 6416(b)(4) and paragraph (b) of this section, shall not be allowed unless there is submitted, in support of the claim for refund or credit, a statement, signed by the person who paid the tax to the United States—

(i) Showing the amount claimed in respect of each category of uses, sales, and resales on which the claim is based and which give rise to a right of refund or credit under section 6416(b)(4) and paragraph (b) of this section,

(ii) Showing that such person is the manufacturer of the articles, in respect of which refund or credit is claimed,

(iii) Showing that such person has in his possession evidence—

(*a*) Identifying the article, both as to nature and quantity, in respect of which refund or credit is claimed;

(*b*) Showing the amount of tax paid in respect of such article, and the date of payment of such tax;

(*c*) Showing that such person sold such article on or in connection with, or with the sale of, or used the article as a component part of, a second article manufactured or produced by him as provided in paragraph (b)(1) of this section; and

(*d*) Identifying the second article both as to nature and quantity; and

(iv) Showing that the person claiming refund or credit has in his possession evidence that such second article has been exported, or has been used or sold as provided in paragraph (b)(2) of this section, and furnishing the evidence required under paragraph (d)(2) of § 48.6416(a)-1.

(2) *Evidence required under subparagraph (1)(v)(a) of this paragraph to be in possession of claimant*—(i) *In general.* The evidence required under subparagraph (1)(v)(*a*) of this paragraph to be in the possession of the person claiming refund or credit shall, in the case of an exportation of second article (as referred to in such subparagraph (1)(v)(*a*)), consist of proof of exportation of the second article in the form prescribed in the regulations applicable under section 4221, and, in other cases, shall consist of a certificate, executed and signed by the ultimate purchaser of the second article, in the form prescribed in subdivision (ii) of this paragraph. However, in cases where the second article passed through a chain of sales from the manufacturer of the second article to the ultimate purchaser of the second article, such evidence may consist of a certificate, executed and signed by the ultimate vendor of the second article, in the form prescribed in subdivision (iii) of this subparagraph, rather than the proof of exportation of the second article or the certificate of the ultimate purchaser of the second article.

(ii) *Certificate of ultimate purchaser of second article.* The certificate of the ultimate purchaser of the second article shall contain the same information as that required in paragraph (c)(1)(ii)(*a*)(*3*) of § 48.6416(b)-2, except that such information shall be furnished in respect of such second article, rather than the article to which the claim relates.

(iii) *Certificate of ultimate vendor of second article.* Any certificate executed and signed by an ultimate vendor as evidence required under subparagraph (1)(v)(*a*) of this paragraph to be retained in the possession of the person claiming refund or credit shall be executed in the same form and manner as that provided in paragraph (c)(1)(ii)(*b*)(*3*) of § 48.6416(b)-2.

(iv) *Repayment or consent of ultimate vendor.* If the person claiming refund or credit of an overpayment has repaid or agreed to repay the amount of the overpayment to the ultimate vendor or if the ultimate vendor consents to the allowance of the refund or credit (see paragraph (d)(2) of § 48.6416(a)-1), a statement to that effect, signed by the ultimate vendor, may be shown on or made a part of, the evidence required to be retained in the possession of the person claiming refund or credit, as provided in subparagraph (1)(v)(*a*) of this paragraph.

(3) *Effective date.* This paragraph has application only in respect of claims filed on or after July 1, 1963.

§ 48.6416(b)-5 Return of installment accounts.

(a) *In general.* Section 6416(b)(5) and paragraph (b) of this section provide that under certain circumstances tax paid under section 4053(b)(1) or section 4216(e)(1) (relating to sales of installment accounts by a retailer or a manufacturer) shall be deemed to be an overpayment. Refund or credit of any overpayment of tax within the meaning of section 6416(b)(5) and paragraph (b) of this section may be claimed only by the person who paid the tax to the United States. No interest shall be allowed on any refund or credit of such overpayment. For provisions relating to the evidence required in support of a claim for refund or credit of such overpayment, see § 301.6402-2 of this chapter (Regulations on Procedure and Administration) and paragraph (c) of this section. For provisions authorizing the taking of a credit in lieu of filing a claim for refund, see section 6416(f) and § 48.6416(f)-1.

(b) *Return of installment account and readjustment of consideration.* In any case in which the tax has been paid to the United States under section 4053 (b)(1) or 4216(e)(1) in respect of an installment account which has been sold by the retailer or manufacturer, as the case may be, and such account is—

(1) Returned to such retailer or manufacturer, pursuant to the agreement under which the account was sold, and

(2) All or some part of the consideration for which the account was sold is repaid or credited to the purchaser of such account as provided in the agreement,

that part of the tax which is proportionate to the part of such consideration so repaid or credited shall be deemed to be an overpayment. The credit or refund allowable may not exceed that part of the tax which bears the same ratio to the total of such tax as the amount repaid or credited to the purchaser of the account bears to the total amount for which the account was sold to the purchaser. This paragraph has no application in any case where an installment account is sold pursuant to the order of, or subject to the approval of, a court of competent jurisdiction in a bankruptcy or insolvency proceeding.

(c) *Evidence required in support of claim for refund or credit*—(1) *In general.* Refund or credit of an overpayment resulting from the return of an installment account and the readjustment of the consideration for which the account was sold, as provided in this section, shall not be allowed unless the person who paid the tax to the United States submits, in support of the claim for refund or credit, a statement, signed by the person who paid the tax to the United States—

(i) Showing the name and address of the person to whom the installment account was sold;

(ii) Showing the amount of tax under section 4053(b)(1) or 4216(e)(1) due the United States by reason of such sale, the amount of such tax paid to the United States, and the date of payment;

(iii) Stating the amount for which the installment account was sold;

(iv) Stating the amount which was repaid or credited to the purchaser of the account by reason of the return of the account to the person claiming the refund or credit; and

(v) Stating that the amount repaid or credited to the purchaser of the account was so repaid or credited pursuant to the agreement under which the account was sold.

(2) *Effective date.* This paragraph has application only in respect of claims filed on or after July 1, 1963.

§ 48.6416(c) Statutory provisions; credit for tax paid on tires, inner tubes, or radio or television receiving sets.

SEC. 6416. *Certain taxes on sales and services* * * *

(c) *Credit for tax paid on tires, inner tubes, or radio or television receiving sets.* If tires, inner tubes, or automobile radio or television receiving sets on which tax has been paid under chapter 32 are sold on or in connection with, or with the sale of, another article taxable under chapter 32, there shall (under regulations prescribed by the Secretary or his delegate) be credited (without interest) against the tax imposed on the sale of such other article, an amount determined by multiplying the applicable percentage rate of tax for such other article by—

(1) The purchase price (less, in the case of tires, the part of such price attributable to the metal rim or rim base) if such tires or inner tubes were taxable under section 4071 (relating to tax on tires and inner tubes) or, in the case of automobile radio or television receiving sets, if such sets were taxable under section 4141; or

(2) If such tires, inner tubes, or automobile radio or television receiving sets were taxable under section 4218 (relating to use by manufacturer, producer, or importer), the price (less, in the case of tires, the part of such price attributable to the metal rim or rim base) at which such or similar tires, inner tubes, or sets are sold, in the ordinary course of trade, by manufacturers, producers, or importers thereof, as determined by the Secretary or his delegate.

The credit provided by this subsection shall be allowable only in respect of the first sale on or in connection with, or with the sale of, another article on the sale of which tax is imposed under chapter 32.

[Sec. 6416(c) as amended and in effect Jan. 1, 1959]

§ 48.6416(c)-1 Credit for tax paid on tires, inner tubes, or automobile radio or television receiving sets.

(a) *Determination of credit.* In any case in which tax under section 4071 or 4141, as the case may be, has been paid to the United States on the use or sale of a tire, inner tube, or automobile radio or television receiving set, and the manufacturer of another article taxable under chapter 32 sells such tire, inner tube, or automobile radio or television receiving set on or in connection with, or with the sale of, such other article, a credit in respect of such tire, inner tube, or receiving set, to be computed as follows, is allowable against the tax imposed on the sale of such other article:

(1) *Purchased by manufacturer of other article.* If the manufacturer of the other article purchased the tire, inner tube, or automobile radio or television receiving set tax-paid, the amount of the credit shall be determined by applying to the purchase price of such tire, inner tube, or receiving set (computed by including tax passed on to such manufacturer and, in the case of a tire, excluding any part of such price attributable to the metal rim or rim base), the percentage rate of tax applicable to the sale of the other article. For example, if the sale price of an automobile is $2,000, tax equivalent to 10 percent of such price (i.e., $200) is imposed under section 4061(a) on the sale of the automobile. If the tires, inner tubes, or automobile radio or television receiving set sold on or in connection with such automobile was purchased by the manufacturer of the automobile for $80 (computed as provided in this subparagraph), a credit of $8 (10 percent of $80) is allowable against the tax imposed on the sale of the automobile.

(2) *Of own manufacture.* If the manufacturer of the other article is also the manufacturer of the tire, inner tube, or automobile radio or television receiving set and incurs tax liability on his use (see section 4218) of such tire, inner tube, or receiving set, the amount of the credit shall be determined by applying to the fair market price of such tire, inner tube, or receiving set the percentage rate of tax applicable to the sale of the other article. For purposes of this section, the fair market price of such tire, inner tube, or receiving set shall be the price at which such or similar tires, inner tubes, or automobile radio or television receiving sets are sold by manufacturers thereof in the ordinary course of trade, as determined by the Commissioner (excluding, in the case of a tire, any part of such price attributable to the metal rim or rim base). Such determination by the Commissioner shall be made in the same manner as determinations made under section 4218.

Such credit shall be allowable only in respect of the first sale taxable under chapter 32 in which the tire, inner tube, or automobile radio or television receiving set is sold on or in connection with, or with the sale of, another article. No interest shall be paid on any such credit allowed under this section. If such credit is not claimed against the tax applicable to the sale of such other article, the manufacturer of such other article may claim refund of an amount equivalent to such credit or may claim credit on any return of tax under chapter 32 which he subsequently files.

§ 48.6416(d) Statutory provisions; mechanical pencils taxable as jewelry.

SEC. 6416. *Certain taxes on sales and services* * * *

(d) *Mechanical pencils taxable as jewelry.* If any article, on the sale of which tax has been paid under section 4201, is further manufactured or processed resulting in an article taxable under section 4001, the person who sells such article at retail shall, in the computation of the retailers' excise tax due on such sale, to be entitled to a credit or refund, without interest, in an amount equal to the tax paid under section 4201.

[Sec. 6416(d) as originally enacted and in effect Jan. 1, 1959]

§ 48.6416(d)-1 Articles taxable as jewelry.

(a) *Refund or credit in respect of manufacturers tax.* In any case in which tax under section 4201 has been paid to the United States on the sale by the manufacturer of a mechanical pencil, fountain pen, ball point pen, or mechanical lighter for cigarettes, cigars, and pipes, and subsequent to such sale the article is further manufactured or processed by any person so as to produce an article taxable under section 4001 (relating to the retailers tax on jewelry and related items), a credit equal to the tax under section 4201 paid to the United States on the manufacturer's sale of such article is allowable against the tax under section 4001 applicable to the first retail sale of such article. If such credit is not claimed against the tax under section 4001 applicable to the first retail sale of such article, the person who made such sale may claim refund of an amount equivalent to such credit or may claim credit on any return of tax under chapter 31 which he subsequently files. No interest shall be paid on any such credit or refund.

(b) *Supporting evidence required*—(1) *In general.* Refund or credit of an amount claimed under section 6416(d) and this section shall not be allowed, in any case, unless there is submitted, in support of the claim for refund or credit, a statement, signed by the person making such claim—

(i) Showing the name and address of the person who paid to the United States the manufacturers excise tax on his sale of the article;

(ii) Identifying such article, both as to nature and quantity;

(iii) Showing the amount of such tax paid to the United States and the date of payment;

(iv) Showing that the article was further manufactured or processed, subsequent to its sale by the original manufacturer, so as to produce an article taxable under section 4001;

(v) Showing that the article has been sold at retail;

(vi) Showing that tax under section 4001 has been reported on such retail sale without adjustment for the tax under section 4201 previously paid in respect of such article; and

(vii) Showing the return period for which such tax under section 4001 was so reported.

(2) *Effective date.* This paragraph has application only in respect of claims filed on or after July 1, 1963.

§ 48.6416(e) Statutory provisions; refund to exporter or shipper.

SEC. 6416. *Certain taxes on sales and services* * * *

(e) *Refund to exporter or shipper.* Under regulations prescribed by the Secretary or his delegate the amount of any tax imposed by subchapter E of chapter 31, or chapter 32 erroneously or illegally collected in respect of any article exported to a foreign country or shipped to a possession of the United States may be refunded to the exporter or shipper thereof, if the person who paid such tax waives his claim to such amount.

[Sec. 6416(e) as originally enacted and in effect Jan. 1, 1959]

§ 48.6416(e)-1 Refund to exporter or shipper.

(a) *In general.* In the case of tax under subchapter E of chapter 31 (relating to diesel and special motor fuel) or under chapter 32 (relating to the manufacturers excise taxes) which is determined to be an overpayment within the meaning of section 6416(b)(2) (A) or (F), section 6416(b)(3) (C) or (D), or section 6416(b)(4), by reason of the exportation of any article, refund of such overpayment may be claimed by the exporter or shipper of such article, rather than by the person who paid the tax to the United States, but only if the person who paid the tax waives his right to claim refund or credit of such tax.

(b) *Supporting evidence required.* Any claim for refund of tax paid to the United States which is filed by an exporter or shipper pursuant to this section must be accompanied by a statement, signed by the person who paid the tax to the United States, showing—

(1) That such person waives his right to claim refund or credit of such tax;

(2) In the case of an overpayment determined under section 6416(b)(2)(A) and paragraph (b)(1) of § 48.6416(b)-2 in respect of an article taxable under section 4061(a), an article taxable under section 4111, an article taxable under section 4121, or an article taxable under section 4141, that, pursuant to section 6416(g), such person had in his possession at the time of his shipment of the article, or at the time title to the article passed to his vendee, whichever is earlier, evidence that the article was to be exported to a foreign country or shipped to a possession of the United States;

(3) The amount of tax paid on the sale of the article and the date of payment; and

(4) The district director's office to which such tax was paid.

In addition, such claim must be accompanied by proof of exportation, in the form prescribed by the regulations applicable under section 4221.

§ 48.6416(f) Statutory provisions; credit on returns.

SEC. 6416. *Certain taxes on sales and services* * * *

(f) *Credit on returns.* Any person entitled to a refund of tax imposed by chapter 31 or 32, paid to the Secretary or his delegate may, instead of filing a claim for refund, take credit therefor against taxes imposed by such chapter due on any subsequent return.

[Sec. 6416(f) as originally enacted and in effect Jan. 1, 1959]

§ 48.6416(f)-1 Credit on returns.

Any person entitled to claim refund of tax under chapter 31 or chapter 32 may, in lieu of claiming refund of such tax, claim credit for such tax on any return of tax under chapter 31 or chapter 32, whichever is appropriate, which he subsequently files. Any such credit claimed on a return must be supported by the evidence prescribed in the applicable regulations in this subpart and § 301.6402-2 of this chapter (Regulations on Procedure and Administration).

§ 48.6416(g) Statutory provisions; automobiles, etc.

SEC. 6416. *Certain taxes on sales and services* * * *

(g) *Automobiles, etc.* Under regulations prescribed by the Secretary or his delegate, subsection (b)(2)(A) shall apply, in the case of any article subject to the tax imposed by sections 4061(a), 4111, 4121, and 4141, only if the article with respect to which the tax was paid was sold by the manufacturer, producer, or importer for export after receipt by him of notice of intent to export or to resell for export.

[Sec. 6416(g) as added and in effect Jan. 1, 1959]

§ 48.6416(g)-1 Intent to export motor vehicles, refrigerators, electrical appliances, radios, etc.

In the case of an article taxable under section 4061(a) (relating to automobiles, etc.), an article taxable under section 4111 (relating to refrigeration equipment), an article taxable under section 4121 (relating to electric, gas, and oil appliances), or an article taxable under section 4141 (relating to radio receiving sets, etc.), section 6416(b)(2)(A) and paragraph (b)(1) of § 48.6416(b)-2 (relating to refund or credit in respect of articles exported to a foreign country or shipped to a possession of the United States) have application only if the manufacturer of the article had in his possession at the time of his shipment of the article or at the time title to the article passed to his vendee, whichever is earlier, evidence that the article was to be exported to a foreign country or shipped to a possession of the United States.

§ 48.6416(h) Statutory provisions; accounting procedures for like articles.

SEC. 6416. *Certain taxes on sales and services* * * *

(h) *Accounting procedures for like articles.* Under regulations prescribed by the Secretary or his delegate, if any person uses or resells like articles, then for purposes of this section the manufacturer, producer, or importer of any such article may be identified, and the amount of tax paid under chapter 32 in respect of such article may be determined—

(1) On a first-in-first-out basis,

(2) On a last-in-first-out basis, or

(3) In accordance with any other consistent method approved by the Secretary or his delegate.

[Sec. 6416(h) as added and in effect Jan. 1, 1959]

§ 48.6416(h)-1 Accounting procedures for like articles.

(a) *Identification of manufacturer.* In any case where a person purchases like articles from various manufacturers, the particular one of such manufacturers from whom any such article was purchased may be determined by such person, for purposes of refund or credit of tax under chapter 32—

(1) On a first-in-first-out basis,

(2) On a last-in-first-out basis, or

(3) In accordance with any other consistent method approved by the district director.

Any person making his first determination under this section may adopt the method prescribed in subparagraph (1) or (2) of this paragraph without securing prior approval by the district director. However, any other method of determining the manufacturer of a particular article must be approved by the district director prior to adoption, unless under such method the actual manufacturer of the article is identified. Moreover, any person who has adopted the method prescribed in subparagraph (1) or (2) of this paragraph for making such determinations, or who has adopted some other method under subparagraph (3) of this paragraph after approval by the district director, may not change such method of making such determinations without first securing the consent of the district director.

(b) *Tax paid to the United States.* In any case where a person has determined the manufacturer of an article in accordance with the method prescribed in subparagraph (1) or (2) of paragraph (a) of this section, or in accordance with some other method under subparagraph (3) of such paragraph (a) after approval by the district director, the determination by such manufacturer of the amount of tax paid to the United States in respect of such article shall be consistent with such method.

§ 48.6416(i) Statutory provisions; meaning of terms.

SEC. 6416. *Certain taxes on sales and services* * * *

(i) *Meaning of terms.* For purposes of this section, any term used in this section has the same meaning as when used in chapter 31, 32, * * * as the case may be.

[Sec. 6416(i) as added and in effect Jan. 1, 1959]

[F.R. Doc. 63-4672; Filed, May 1, 1963; 8:50 a.m.]

Chapter II—Tax Court of the United States

PART 701—RULES OF PRACTICE

Pretrial Conferences; Evidence

A new § 701.28 has been adopted, and § 701.31(b)(5) is amended, as follows:

§ 701.28 Pretrial conferences.

(a) *General.* In appropriate cases the Court will undertake to confer with the parties in pretrial conferences with a view to narrowing issues, stipulating facts, simplifying the presentation of evidence or otherwise assisting in the preparation for trial or possible disposition of the case in whole or in part without trial.

(b) *Cases calendared for trial.* Either party in a case listed for trial on any trial calendar may request of the trial judge, or the judge on his own motion may order, a pretrial conference. The trial judge may, in his discretion, set the case for a pretrial conference at such time and place during the calendar or prior thereto as may appear to be practicable and appropriate.

(c) *Cases not yet calendared for trial.* Prior to listing of any case for trial, the Chief Judge in his discretion, upon motion of either party or upon his own motion, may place any case upon the next calendar in the city involved for a pretrial conference, or may assign a particular case to a judge for a pretrial conference either in Washington, D.C., or in any other city where such conference may conveniently be held.

(d) *Conditions.* A request or motion for a pretrial conference shall include a statement of the reasons therefor. Pretrial conferences will in no circumstances be held as a substitute for the conferences required between the parties by § 701.31(b)(2), and a pretrial conference for the purpose of assisting the parties in entering into the stipulations called for by § 701.31(b)(1) will be held by the Court only where the party requesting such pretrial conference has in good faith attempted without success to obtain such stipulation from his adversary. Nor will any pretrial conference be held where the Court is satisfied that the request therefor is frivolous or is made for purposes of delay.

(e) *Order.* The judge holding a pretrial conference may, in his discretion, issue an appropriate order.

§ 701.31 Evidence and submission of evidence.

* * * * *

(b) *Stipulations.* * * *

(5) *Results of noncompliance by a party.* (i) If at the date of issuance of trial notice in a case a party has failed to confer with his adversary, or has refused or failed to stipulate the facts and evidence which are not in dispute or fairly should not be in dispute, and after trial notice, still fails or refuses to stipulate, as required under subparagraphs (1) and (2) of this paragraph, the party proposing to stipulate may within 50 days, but not less than 35 days, prior to the date set for call of the case from a trial calendar, file with the Court a motion for an order to show cause why the facts and evidence covered in his motion should not be accepted as established for the purposes of the case. The facts and evidence of the proposed stipulation covered by the motion shall be shown with particularity and by numbered paragraphs. The motion shall contain adequate references to the sources of the matter set forth, and where such sources are in possession or under control of the moving party, the motion shall also show that the opposing party has had and has reasonable access thereto. The motion shall be accompanied by proof of service on the opposing party or his counsel. Upon the filing of such motion, an order to show cause as moved shall be issued forthwith, unless the Court, in its discretion, directs otherwise.

(ii) The party against whom the order to show cause has issued shall, within 25 days of the date of such order, file a response listing by numbers the paragraphs in the proposed stipulation in respect of which there is no dispute. Where there is disagreement with respect to any paragraph in part only, the response shall show the part admitted and the part denied. Where there is any disagreement with respect to any paragraph, either in whole or in part, or where the disagreement takes the form merely of a variance in the statement of the facts or evidence, the response shall show the basis for the disagreement including references to pertinent sources. Where the truth and authenticity of facts or evidence is not disputed, an objection on the ground of materiality or relevance may be noted but is not to be regarded as just cause for refusal to stipulate. The response shall be accompanied by proof of service on the opposing party or his counsel.

(iii) The matters covered by the show cause order and response shall be heard at the call of the case from the trial calendar, or, if practicable, at such earlier time and at such place as the Chief Judge in his discretion may fix.

These amendments are effective June 1, 1963.

Dated: April 29, 1963.

By the Court.

NORMAN O. TIETJENS,
Chief Judge,
Tax Court of the United States.

[F.R. Doc. 63-4661; Filed, May 1, 1963; 8:48 a.m.]

Title 7—AGRICULTURE

Chapter XIV—Commodity Credit Corporation, Department of Agriculture

SUBCHAPTER B—LOANS, PURCHASES AND OTHER OPERATIONS

[1962 C.C.C. Grain Price Support Bulletin 1, Supp. 1, Amdt. 2, Soybeans]

PART 1421—GRAINS AND RELATED COMMODITIES

Subpart—1962-Crop Soybean Loan and Purchase Agreement Program

MATURITY OF LOANS

The regulations issued by the Commodity Credit Corporation, published in 27 F.R. 6525 and 8167 and containing specific requirements of the 1962-crop soybean price support program are hereby amended to read as follows:

Section 1421.1610 is amended to allow a later maturity date.

§ 1421.1610 Maturity of loans.

Unless demand is made earlier, loans on soybeans will mature on May 31, 1963, except that by written agreement with a producer, CCC may establish July 31, 1963, as the maturity date applicable to his farm-storage loan or purchase agreement.

(Sec. 4, 62 Stat. 1070 as amended; 15 U.S.C. 714b. Interpret or apply sec. 5, 62 Stat. 1072, secs. 203, 301, 401, 63 Stat. 1054; 7 U.S.C. 1446(d), 1447, 1421)

Effective date: Upon publication in the FEDERAL REGISTER.

Signed at Washington, D.C., on April 26, 1963.

E. A. JAENKE,
Acting Executive Vice President,
Commodity Credit Corporation.

[F.R. Doc. 63-4681; Filed, May 1, 1963; 8:50 a.m.]

Title 9—ANIMALS AND ANIMAL PRODUCTS

Chapter I—Agricultural Research Service, Department of Agriculture

SUBCHAPTER C—INTERSTATE TRANSPORTATION OF ANIMALS AND POULTRY

PART 74—SCABIES IN SHEEP

Interstate Movement

Pursuant to the provisions of sections 1 through 4 of the Act of March 3, 1905, as amended, sections 1 and 2 of the Act of February 2, 1903, as amended, and sections 4 through 7 of the Act of May 29, 1884, as amended (21 U.S.C. 111-113, 115, 117, 120, 121, 123-126), §§ 74.2 and 74.3 of Part 74, Subchapter C, Chapter I, Title 9, Code of Federal Regulations, as amended, are hereby amended to read, respectively, as follows:

§ 74.2 Designation of free and infected areas.

(a) Notice is hereby given that sheep in the following States, Territories, and District, or parts thereof as specified, are not known to be infected with scabies, and such States, Territories, District, and parts thereof, are hereby designated as free areas:

(1) Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Louisiana, Maine, Massachusetts, Montana, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oregon, Puerto Rico, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming;

(2) The following Counties in Nebraska: Arthur, Banner, Blaine, Box Butte, Brown, Chase, Cherry, Cheyenne, Dawes, Deuel, Dundy, Garden, Grant, Hooker, Keith, Keya Paha, Kimball, Loup, Morrill, Perkins, Rock, Sheridan, Sioux, Scotts Bluff, and Thomas;

(3) The following Counties in Kansas: Republic, Cloud, Ottawa, Saline, McPherson, Harvey, Sedgwick, and Sumner, and all Counties in the State of Kansas lying west thereof;

(4) The following Counties in Michigan: Alcona, Alger, Alpena, Antrim, Baraga, Benzie, Charlevoix, Cheboygan, Chippewa, Crawford, Delta, Dickinson, Emmet, Gogebic, Grand Traverse, Houghton, Iron, Kalkaska, Keweenaw, Leelanau, Luce, Mackinac, Manistee, Marquette, Menominee, Missaukee, Montmorency, Ontonagon, Oscoda, Otsego, Presque, Isle, Roscommon, Schoolcraft, and Waxford;

(5) The following Counties in Hawaii: Honolulu, Kauai, and Maui;

(6) All Counties in Mississippi except Bolivar and Washington;

(7) St. John and St. Thomas Islands of the Virgin Islands of the United States.

(b) Notice is hereby given also that sheep scabies exists in all States and Territories and parts of States not designated as free areas in paragraph (a) of this section, and they are hereby designated as infected areas.

§ 74.3 Designation of eradication areas.

(a) Notice is hereby given that sheep in the following States, Territory, or parts thereof as specified, are being handled systematically to eradicate scabies in sheep, and such States, Territory, and parts thereof, are hereby designated as eradication areas:

(1) Illinois, Kentucky, Maryland, Minnesota, New Jersey, Oklahoma, Pennsylvania, Tennessee, and Virginia;

(2) All Counties in Nebraska except Arthur, Banner, Blaine, Box Butte, Brown, Chase, Cherry, Cheyenne, Dawes, Deuel, Dundy, Garden, Grant, Hooker, Keith, Keya Paha, Kimball, Loup, Morrill, Perkins, Rock, Sheridan, Sioux, Scotts Bluff, and Thomas;

(3) All Counties in Hawaii except Honolulu, Kauai, and Maui;

(4) The following Counties in Kansas: Washington, Clay, Dickinson, Marion, Butler, Cowley, and all Counties in the State of Kansas lying east thereof;

(5) The following Counties in Missouri: Jackson, Lafayette, Saline, Cooper, Moniteau, Cole, Osage, Gasconade, Franklin, St. Louis, and all Counties in the State of Missouri lying south thereof;

(6) The following Counties in Michigan: Allegan, Arenac, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clare, Clinton, Eaton, Genesee, Gladwin, Gratiot, Hillsdale, Huron, Ingham, Ionia, Iosco, Isabella, Jackson, Kalamazoo, Kent, Lake, Lapeer, Lenawee, Livingston, Macomb, Mason, Mecosta, Midland, Monroe, Montcalm, Muskegon, Newaygo, Oakland, Oceana, Ogemaw, Osceola, Ottawa, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, Van Buren, Washtenaw, and Wayne;

(7) The following Counties in Mississippi: Bolivar and Washington;

(8) The following Counties in West Virginia: Berkeley, Fayette, Grant, Greenbrier, Hampshire, Hardy, Jefferson, Mercer, Mineral, Monroe, Morgan, Nicholas, Pendleton, Pocahontas, Raleigh, Randolph, Summers, Tucker, Upshur, and Webster;

(9) St. Croix Island of the Virgin Islands of the United States.

(Secs. 4–7, 23 Stat. 32, as amended, secs. 1, 2, 32 Stat. 791–792, as amended, secs. 1–4, 33 Stat. 1264, as amended, 1265, as amended; 21 U.S.C. 111–113, 115, 117, 120, 121, 123–126; 19 F.R. 74, as amended)

Effective date. The foregoing amendments shall become effective upon issuance.

The amendments add five counties in the State of New Mexico to the free areas, and deletes such counties from the infected and eradication areas as sheep scabies is no longer known to exist in these counties. The entire State of New Mexico has now been designated as a free area. Hereafter, the restrictions pertaining to the interstate movement of sheep from or into infected and eradication areas, as contained in 9 CFR Part 74, as amended, will not apply to New Mexico. However, the restrictions in said Part 74 pertaining to the interstate movement of sheep from or into free areas will apply to this State.

The amendments relieve certain restrictions presently imposed and must be made effective immediately to be of maximum benefit to persons subject to the restrictions which are relieved. Accordingly, under section 4 of the Administrative Procedure Act (5 U.S.C. 1003), it is found upon good cause that notice and other public procedure with respect to the amendments are impracticable and contrary to the public interest, and the amendments may be made effective less than 30 days after publication in the FEDERAL REGISTER.

Done at Washington, D.C., this 29th day of April 1963.

B. T. SHAW,
Administrator,
Agricultural Research Service.

[F.R. Doc. 63–4679; Filed, May 1, 1963; 8:50 a.m.]

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Agency

SUBCHAPTER E—AIRSPACE [NEW]

[Airspace Docket No. 62–SW–54]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, CONTROLLED AIRSPACE, AND REPORTING POINTS [NEW]

Alteration of Federal Airway and Associated Control Areas

On January 30, 1963, a notice of proposed rule making was published in the FEDERAL REGISTER (28 F.R. 871) stating that the Federal Aviation Agency was considering the revocation of the segment of VOR Federal airway No. 516 between Tobe, Colo., and Liberal, Kans.

Interested persons have been afforded an opportunity to participate in the making of the rule herein adopted. The Air Transport Association of America concurred in the proposed action and no other comments were received.

The substance of the proposed amendment having been published, therefore, and for the reasons stated in the notice, the following action is taken:

In § 71.123 (27 F.R. 220–6, November 10, 1963) V–516 "From Tobe, Colo., via Liberal, Kans.;" is deleted and "From Liberal, Kans., via" is substituted therefor.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

This amendment shall become effective 0001, e.s.t., June 27, 1963.

Issued in Washington, D.C., on April 25, 1963.

CLIFFORD P. BURTON,
Chief,
Airspace Utilization Division.

[F.R. Doc. 63–4634; Filed, May 1, 1963; 8:45 a.m.]

[Airspace Docket No. 62–WE–71]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, CONTROLLED AIRSPACE, AND REPORTING POINTS [NEW]

Alteration of Federal Airways, Designation of Transition Area and Revocation of Transition Area

On August 7, 1962, a notice of proposed rule making was published in the FEDERAL REGISTER (27 F.R. 7795) stating that the Federal Aviation Agency proposed to alter V–23 west alternate and V–121 between Medford, Oreg., and Eugene, Oreg., designate the Roseburg, Oreg., transition area and revoke the Drain, Oreg., transition area.

Interested persons have been afforded an opportunity to participate in the making of the rules herein adopted, and no adverse comments were received regarding the proposed amendments.

The substance of the proposed amendments having been published, and for the reasons stated in the notice, the following actions are taken:

1. Section 71.123 (27 F.R. 220–6, November 10, 1962, 27 F.R. 11497, 28 F.R. 721, 1419, 1718) is amended as follows:

a. In V–23 "including an E alternate and also a W alternate via INT of Medford 335° and Eugene 187° radials;" is deleted and "including an E alternate and also a W alternate from Medford to Eugene via Roseburg, Oreg., and INT of Roseburg 003° and Eugene 187° radials;" is substituted therefor.

b. V–121 is amended to read: V–121 From Medford, Oreg., via Roseburg, Oreg.; North Bend, Oreg., to Eugene, Oreg.

2. Section 71.181 (27 F.R. 220–139, November 10, 1962) is amended as follows:

a. The Drain, Oreg., transition area is revoked.

b. The following transition area is added:

Roseburg, Oreg.

That airspace extending upward from 1,200 feet above the surface within 7 miles E and 10 miles W of the Roseburg VOR 175° and 355° radials extending from 20 miles N to 12 miles S of the VOR.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

These amendments shall become effective 0001, e.s.t., June 27, 1963.

Issued in Washington, D.C., on April 25, 1963.

CLIFFORD P. BURTON,
Chief,
Airspace Utilization Division.

[F.R. Doc. 63–4635; Filed, May 1, 1963; 8:45 a.m.]

[Airspace Docket No. 62–WE–113]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, CONTROLLED AIRSPACE, AND REPORTING POINTS [NEW]

Alteration of Federal Airways and Associated Control Areas; Alteration and Revocation of Transition Areas and Designation of Control Zone

On January 23, 1963, a notice of proposed rule making was published in the FEDERAL REGISTER (28 F.R. 596) stating that the Federal Aviation Agency proposed to designate the Riverton, Wyo., control zone, alter the Riverton, Wyo., transition area, revoke the Boysen Reservoir, Wyo., transition area and alter V–187 and V–85 and their associated control areas.

Interested persons have been afforded an opportunity to participate in the making of the rules herein adopted, and no adverse comments were received regarding the proposed amendments.

The substance of the proposed amendments having been published and for the reasons stated in the notice, the following actions are taken:

1. Section 71.171 (27 F.R. 220–91, November 10, 1962) is amended by adding the following:

Riverton, Wyo.

Within a 5-mile radius of Riverton Municipal Airport (latitude 43°03′45″ N., longitude 108°27′15″ W.); within 2 miles each side of the Riverton VOR 121° radial extending from the 5-mile radius zone to 8 miles SE of the VOR, and within 2 miles each side of the Riverton VOR 291° radial extending from the 5-mile radius zone to 8 miles NW of the VOR, from 0500 to 1700 hours, local time, daily.

2. In § 71.181 (27 F.R. 220–139, November 10, 1962), the Riverton, Wyo., transition area is amended to read:

Riverton, Wyo.

That airspace extending upward from 700 feet above the surface within a 5-mile radius of Riverton Municipal Airport (latitude 43°03′45″ N., longitude 108°27′15″ W.), within 2 miles each side of the Riverton VOR 121° radial extending from the 5-mile radius area to 8 miles SE of the VOR, and within 2 miles each side of the Riverton VOR 291° radial extending from the 5-mile radius area to 8 miles NW of the VOR; that airspace extending upward from 1,200 feet above the surface within a 20-mile radius of the Riverton VOR, and within 10 miles E and 7 miles W of the Riverton VOR 016° radial extending from the 20-mile radius area to 38 miles N of the VOR.

3. Section 71.181 (27 F.R. 220–139, November 10, 1962), is amended by revoking the following: Boysen Reservoir, Wyo.

4. Section 71.123 (27 F.R. 220–6, November 10, 1962), is amended as follows:

a. In V–85 "From Medicine Bow, Wyo., to Casper, Wyo., including a W alternate via INT of Medicine Bow 336° and Casper 216° radials." is deleted and "From Medicine Bow, Wyo., via Casper, Wyo., including a W alternate via INT of Medicine Bow 336° and Casper 216° radials; to Riverton, Wyo." is substituted therefor.

b. In V–187 "and Boysen Reservoir, Wyo., 186° radials;" is deleted and "and Riverton, Wyo., 180° radials; Riverton;" is substituted therefor.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

These amendments shall become effective 0001, e.s.t., June 27, 1963.

Issued in Washington, D.C., on April 25, 1963.

CLIFFORD P. BURTON,
Chief,
Airspace Utilization Division.

[F.R. Doc. 63–4636; Filed, May 1, 1963; 8:45 a.m.]

[Airspace Docket No. 63–WA–32]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, CONTROLLED AIRSPACE, AND REPORTING POINTS [NEW]

Designation of Reporting Point

The purpose of this amendment to Part 71 [New] of the Federal Aviation Regulations is to designate the Sault Ste. Marie, Mich., radio beacon as a low altitude reporting point.

The Canadian Department of Transport has requested that the Sault Ste. Marie radio beacon be designated a reporting point to facilitate air traffic control on Red Federal airway No. 92 between Sault Ste. Marie and Sudbury, Canada.

Since this amendment is procedural in nature and does not assign or reassign the use of navigable airspace, compliance with the notice and public procedure of the Administrative Procedure Act is unnecessary. However, since it is necessary that sufficient time be allowed to permit appropriate changes to be made on aeronautical charts, this amendment will become effective more than 30 days after publication.

In consideration of the foregoing, the following action is taken:

In the text of § 71.203 (27 F.R. 220–157, November 10, 1962) the following is added:

Sault Ste. Marie, Mich., RBN.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

This amendment shall become effective 0001, e.s.t., June 27, 1963.

Issued in Washington, D.C. on April 25, 1963.

CLIFFORD P. BURTON,
Chief,
Airspace Utilization Division.

[F.R. Doc. 63–4639; Filed, May 1, 1963; 8:45 a.m.]

[Airspace Docket No. 63–SO–9]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, CONTROLLED AIRSPACE, AND REPORTING POINTS [NEW]

PART 75—ESTABLISHMENT OF JET ROUTES [NEW]

Alteration of Jet Route and Reporting Points

The purpose of these amendments to §§ 75.100 and 71.207 of the Federal Aviation Regulations is to alter a segment of Jet Route No. 75 between Alma, Ga., and Columbia, S.C., and to revoke unnecessary reporting points.

Jet Route No. 75 is described in part from the Alma VORTAC, via the Allendale, S.C., VOR, to the Columbia VOR.

Realigning this jet route segment to eliminate the Allendale VOR from the description of J–75 will require only a one degree change in the radial from the Alma VORTAC to provide lateral separation from Prohibited Area P–378. This will eliminate one reporting point and the necessity to utilize the Allendale VOR for avigation. The Wichita Falls, Tex., and Allendale, S.C., high altitude reporting points are no longer required due to alteration of jet routes.

Accordingly action is taken herein to realign Jet Route No. 75 as described above. Action is also taken herein to revoke the high altitude reporting points at Wichita Falls, Tex., and Allendale, S.C.

Since these amendments are minor in nature and impose no additional burden on any person, notice and public procedure hereon are unnecessary. However, since it is necessary that sufficient time be allowed to permit appropriate changes to be made on aeronautical charts, these amendments will become effective more than 30 days after publication.

In consideration of the foregoing, the following actions are taken:

1. In § 75.100 (28 F.R. 19–50, January 26, 1963, 28 F.R. 521), in the text of Jet Route No. 75 "Allendale, S.C.; Columbia, S.C." is deleted and "INT of the Alma 036° and the Columbia, S.C., 193° radials; Columbia;" is substituted therefor.

2. In § 71.207 (27 F.R. 220–170, November 10, 1962) "Wichita Falls, Tex." and "Allendale, S.C." are revoked.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

These amendments shall become effective 0001, e.s.t., June 27, 1963.

Issued in Washington, D.C., on April 25, 1963.

CLIFFORD P. BURTON,
Chief,
Airspace Utilization Division.

[F.R. Doc. 63–4638; Filed, May 1, 1963; 8:45 a.m.]

[Airspace Docket No. 62–WE–145]

PART 75—ESTABLISHMENT OF JET ROUTES [NEW]

Alteration of Jet Advisory Area

On February 15, 1963, a notice of proposed rule making was published in the FEDERAL REGISTER (28 F.R. 1486) stating that the Federal Aviation Agency proposed to alter the jet advisory area associated with Jet Route No. 10 between Farmington, N. Mex., and Denver, Colo., by substituting radar advisory service for nonradar advisory service.

The National Business Aircraft Association objected to the radar jet advisory service being limited to "scheduled air carrier aircraft". Special Civil Air Regulation No. 444 (26 F.R. 292) provided for the establishment of radar advisory areas "for the purpose of providing additional traffic advisory service for U.S. and foreign scheduled air carrier aircraft". However, this service has been extended to other civil users and in FAA Draft

Release No. 63-3 (28 F.R. 1004), in which Special Civil Air Regulation No. 444 is proposed to be recodified in Part 91 [New] of the Federal Aviation Regulations, the reference to U.S. and foreign scheduled air carrier aircraft would be deleted.

No other adverse comments were received regarding the proposed amendment.

Interested persons have been afforded an opportunity to participate in the making of the rules herein adopted, and due consideration has been given to all relevant matter presented.

The substance of the proposed amendment having been published, therefore, and for the reasons stated in the notice, the following action is taken:

In § 75.200 (28 F.R. 19-60, January 26, 1963) Jet Route No. 10 jet advisory area is amended to read:

Jet Route No. 10 jet advisory area. Radar—Los Angeles, Calif., to Denver, Colo.

This amendment shall become effective 0001, e.s.t., June 27, 1963.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

Issued in Washington, D.C., on April 25, 1963.

CLIFFORD P. BURTON,
Chief,
Airspace Utilization Division.

[F.R. Doc. 63-4637; Filed, May 1, 1963; 8:45 a.m.]

Title 16—COMMERCIAL PRACTICES

Chapter I—Federal Trade Commission

[Docket No. 6485]

PART 13—PROHIBITED TRADE PRACTICES

B. F. Goodrich Co. and Texas Co.

Subpart—Cutting off access to customers or market: § 13.535 *Contracts restricting customers' handling of competing products.* Subpart—Dealing on Exclusive and tying basis: § 13.670 *Dealing on exclusive and tying basis;* § 13.-670-20 *Federal Trade Commission Act.*

(Sec. 6, 38 Stat. 721; 15 U.S.C. 46. Interpret or apply sec. 5, 38 Stat. 719, as amended; 15 U.S.C. 45) [Cease and desist order, The B.F. Goodrich Company, Akron, Ohio, et al., Docket 6485, Apr. 15, 1963]

Order requiring (1) one of the four leading United States manufacturers of rubber products, including tires and inner tubes, and engaged also in the purchase and resale of batteries, automotive parts and accessories (TBA products), with total net sales in 1954 exceeding one-half billion dollars, and (2) a large producer of petroleum products, with net sales of more than one and one-half billion dollars in 1954, selling its petroleum products to more than 42,000 service stations, a substantial number of which sold TBA products, to cease entering into such restrictive contracts as those under which Texas agreed to promote the sale of Goodrich's TBA products to service stations and distributors selling Texas petroleum products and Goodrich paid Texas an "override" commission ranging from 5 percent to 10 percent on the net sales of TBA products to Texas service stations and distributors in return for Texas' aid in promoting said sales; requiring Texas to cease accepting anything of value for promoting such TBA sales, using its relationship with its outlets to induce them, intimidating or coercing its dealers to comply, and preventing them from dealing in TBA products of their own independent choice; and requiring Goodrich to cease paying anything of value to Texas or any other marketing oil company for promoting the sale of TBA products to Texas' dealers or reporting to the oil company concerning TBA sales to them.

The order to cease and desist is as follows:

It is ordered, That respondent, The Texas Company, a corporation, and its officers, agents, representatives and employees, directly or through any corporate or other device in connection with the promotion, offering for sale, or sale and distribution of tires, inner tubes, batteries, and automotive accessories and supplies (hereinafter referred to as "TBA products") in commerce as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from, directly or indirectly:

1. Entering into or continuing in operation or effect any contract, agreement or combination, express or implied, with The B. F. Goodrich Company, or with any other rubber company or tire manufacturer, or any other supplier of tires, batteries, or accessories, whereby The Texas Company receives anything of value in connection with the sale of TBA products to any wholesaler or retailer of Texas petroleum products by any marketer or distributor of TBA products other than The Texas Company;

2. Accepting or receiving anything of value from any manufacturer, distributor, wholesaler, or other vendor of TBA products, for acting as sales agent or for otherwise sponsoring, recommending, urging, inducing, or promoting the sale of TBA products, directly or indirectly, by any such vendor to any wholesaler or retailer of The Texas Company petroleum products;

3. Using or attempting to use any contractual or other device, such as, but not limited to, agreements, leases, training programs, promotions, dealer meetings, dealer discussions, service station identification, credit cards, and financial loans, to sponsor, recommend, urge, induce, or otherwise promote the sale of TBA products by any distributor or marketer of such products other than The Texas Company to or through any wholesaler or retailer of The Texas Company petroleum products;

4. Employing any method of inspecting, reporting, or surveillance or using or attempting to use, in any manner, its relationship with Texas outlets to sponsor, recommend, urge, induce, or otherwise promote the sale of any specified brand or brands of TBA products by any distributor or marketer of such products other than The Texas Company to any wholesaler or retailer of Texas petroleum products;

5. Intimidating or coercing or attempting to intimidate or coerce any wholesaler or retailer of The Texas Company petroleum products to purchase any brand or brands of TBA products;

6. Preventing or attempting to prevent any wholesaler or retalier of The Texas Company petroleum products from purchasing and reselling, merchandising, or displaying TBA products of his own independent choice.

It is further ordered, That respondent, The B. F. Goodrich Company, a corporation, and its officers, agents, representatives and employees, directly or through any corporate or other device, in connection with the promotion, offering for sale or sale and distribution of tires, inner tubes, batteries and automotive accessories and supplies (hereinafter referred to as "TBA products") in commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from, directly or indirectly:

1. Entering into or continuing in operation or effect any contract, agreement or combination express or implied, with The Texas Company or with any other marketing oil company whereby The B. F. Goodrich Company, directly or indirectly, pays or contributes anything of value to any such marketing oil company in connection with the sale of TBA products by The B. F. Goodrich Company or any distributor of Goodrich products to any wholesaler or retailer of petroleum products of such marketing oil company;

2. Paying, granting or allowing, or offering to pay, grant or allow, anything of value to The Texas Company or to any other marketing oil company for acting as sales agent or for otherwise sponsoring, recommending, urging, inducing or promoting the sale of TBA products, directly or indirectly, by The B. F. Goodrich Company or any distributor of Goodrich products to any wholesaler or retailer of petroleum products of such marketing oil company;

3. Reporting or participating in the reporting to The Texas Company or to any other marketing oil company concerning sales of TBA products to wholesalers or retailers of petroleum products, individually or by groups, of any such marketing oil company.

By "Decision and Order", report of compliance was required as follows:

It is further ordered, That respondents B. F. Goodrich Co. and Texaco, Inc., shall, within sixty (60) days after service upon them of this order file with the Commission a report, in writing, setting forth in detail the manner and form in which they have complied with the order to cease and desist.

Issued: April 15, 1963.

By the Commission, Commissioner Anderson not concurring for the reason that the command of the remand order of March 9, 1961, has not been met and complied with; and Commissioner MacIntyre not participating.

[SEAL] Joseph W. Shea,
Secretary.

[F.R. Doc. 63-4645; Filed, May 1, 1963; 8:46 a.m.]

[Docket No. C-492]

PART 13—PROHIBITED TRADE PRACTICES

Whiting Sales Co., Inc., et al.

Subpart—Furnishing means and instrumentalities of misrepresentation or deception: § 13.1055 *Furnishing means and instrumentalities of misrepresentation or deception;* § 13.1055-50 *Preticketing merchandise misleadingly.* Subpart—Misbranding or mislabeling: § 13.1185 *Composition;* § 13.1185-40 *In general.*

(Sec. 6, 38 Stat. 721; 15 U.S.C. 46. Interpret or apply sec. 5, 38 Stat. 719, as amended; 15 U.S.C. 45) [Cease and desist order, Whiting Sales Company, Inc., et al., New York, N.Y., Docket C-492, Apr. 17, 1963]

In the Matter of Whiting Sales Company, Inc., a Corporation, Also Trading as Whiting Manufacturing Company, and C. Ross Whiting, Joseph R. Godar, Kathleen Zink, and Kathryn Whiting, Individually and as Officers of Said Corporation

Consent order requiring Cincinnati distributors to jobbers, retailers, and dealers of pillows filled with various kinds of feathers and down, to cease such unfair practices as representing falsely that their "White Star" style pillows were filled entirely with new down by the statement on affixed tags "All New Material Consisting of White Down."

The order to cease and desist, including further order requiring report of compliance therewith, is as follows:

It is ordered, That respondents Whiting Sales Company, Inc., a corporation, also trading as Whiting Manufacturing Company or any other name or names, and its officers, and C. Ross Whiting, Joseph R. Godar, Kathleen Zink and Kathryn Whiting, individually and as officers of said corporation, and respondents' agents, representatives and employees, directly or through any corporate or other device, in connection with the offering for sale, sale and distribution of feather and down products or any other products, in commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from:

1. Misrepresenting, in any manner, or by any means, directly or by implication, the identity of the kind or type of filling material contained in any such products, or of the kinds or types, and proportions of each, when the filling material is a mixture of more than one kind or type.

2. Placing in the hands of jobbers, retailers, dealers, and others, means and instrumentalities by and through which they may deceive and mislead the purchasing public concerning any merchandise in the respects set out above.

It is further ordered, That the respondents herein shall, within sixty (60) days after service upon them of this order, file with the Commission a report in writing setting forth in detail the manner and form in which they have complied with this order.

Issued: April 17, 1963.

By the Commission.

[SEAL] Joseph W. Shea,
Secretary.

[F.R. Doc. 63-4646; Filed, May 1, 1963; 8:46 a.m.]

Title 17—COMMODITY AND SECURITIES EXCHANGES

Chapter II—Securities and Exchange Commission

[Release 33-4601]

PART 201—RULES OF PRACTICE

Motions and Applications

The Securities and Exchange Commission has amended the caption to paragraph (c) of Rule 12 of its rules of practice (§ 201.12 of this chapter) to add the word "stays" to said caption.

In 1962 the Commission amended Rule 12(c) (§ 201.12(c)) to set forth the procedure whereby petitions may be made to the Commission for a stay of the effectiveness of any of its orders. (Securities Act of 1933 Release No. 4459, and the Federal Register of March 14, 1962, 27 F.R. 2398). The purpose of the present amendment is to facilitate reference to this portion of the rules of practice.

Accordingly, the caption of paragraph (c) of § 201.12 is amended to read as follows:

§ 201.12 Motions and applications.

* * * * *

(c) *Filing of motions to Commission; briefs; stays.*

* * * * *

The Commission finds that the foregoing amendment involves a matter of practice or procedure and that notice and subsequent procedure pursuant to subsections (a) and (b) of section 4 of the Administrative Procedure Act are not required. The Commission also finds that the provisions of subsection (c) of section 4 of the Administrative Procedure Act regarding postponement of the effective date are inapplicable inasmuch as this is not a substantive rule.

Accordingly, the foregoing action, which is taken pursuant to the Securities Act of 1933, particularly section 19 (a) thereof; the Securities Exchange Act of 1934, particularly sections 15A(b)(4) and 23(a) thereof; the Public Utility Holding Company Act of 1935, particularly section 20(a) thereof; the Trust Indenture Act of 1939, particularly section 319(a) thereof; the Investment Company Act of 1940, particularly section 38(a) thereof; and the Investment Advisers Act of 1940, particularly section 211(a) thereof, shall become effective April 26, 1963.

By the Commission.

[SEAL] Orval L. DuBois,
Secretary.

April 26, 1963.

[F.R. Doc. 63-4658; Filed, May 1, 1963; 8:48 a.m.]

Title 19—CUSTOMS DUTIES

Chapter I—Bureau of Customs, Department of the Treasury

[T.D. 55882]

PART 6—AIR COMMERCE REGULATIONS

Tucson International Airport

The official name of the Tucson Municipal Airport, Tucson, Arizona, which is a designated international airport (airport of entry), was changed by the Tucson Airport Authority on April 1, 1963, to "Tucson International Airport." Section 6.13 of the Customs Regulations is amended by substituting the name "Tucson International Airport" for the name "Tucson Municipal Airport" opposite Tucson, Arizona.

(R.S. 161, sec. 1109, 72 Stat. 799; 5 U.S.C. 22; 49 U.S.C. 1509)

[SEAL] Philip Nichols, Jr.,
Commissioner of Customs.

Approved: April 25, 1963.

James P. Hendrick,
Acting Assistant Secretary of the Treasury.

[F.R. Doc. 63-4664; Filed, May 1, 1963; 8:49 a.m.]

Title 32—NATIONAL DEFENSE

Chapter VII—Department of the Air Force

SUBCHAPTER W—AIR FORCE PROCUREMENT INSTRUCTION

MISCELLANEOUS AMENDMENTS TO SUBCHAPTER

Subchapter W of Title 32 is amended as follows:

PART 1013—GOVERNMENT PROPERTY

Subpart A—General

Revise § 1013.102 to read as follows:

§ 1013.102 General policy.

AF policy is that Government property will be furnished to contractors, including subcontractors, only when specifically provided for in the terms of a written contract, bailment agreement, or lease. Any deviation from this policy will be granted only by the prior written approval of the Director of Procurement and Production, Hq USAF.

Subpart C is revised to read as follows:

Subpart C—Special Tooling

§ 1013.351 Classification and approval of "special test equipment" and "other special equipment" (BOB 21–R209).

Special test equipment and other special equipment are elements of special tooling which must be given special consideration, particularly when such equipment includes general purpose items as components, assemblies, or subsystems. It is not intended to segregate such general purpose items for acquisition by means other than the supply or service contract under which the equipment is authorized. Accordingly, the following policies and procedures will apply to the classification and approval of special test equipment and other special equipment.

(a) Classification as special test equipment or other special equipment will be made on the basis of (1) The composite unit or system, rather than by individual components, and (2) when any one of the following criteria is met:

(i) Single purpose unit or system designed and fabricated to satisfy appropriate contract specification or technical requirements and is not a unit or system manufactured for retail distribution.

(ii) General purpose unit or system which is modified to such an extent that it becomes special purpose and cannot be returned to its original configuration or capability without substantial remodification or restoration.

(iii) Unit or system is for a special task and is specifically defined in the supply or service contract proposal and resultant contract.

(b) The contracting officer of the cognizant buying activity will be responsible for initially assuring that contractor's proposals anticipating requirements for new special test equipment or other special equipment are supported by the contractor's best estimate of the items and cost of equipment proposed to be fabricated or acquired. This estimate includes the nomenclature, functional description and reason it cannot be performed with standard equipment, and estimated (engineering, labor, material) costs. The contractor's estimate will be reviewed by the contracting officer and appropriate technical personnel of the buying activity to assure that: (1) Facilities have not been included, (2) funds are available and will be provided under the contract for such equipment, and (3) the special test equipment or other special equipment is necessary to meet the contract requirements as contemplated within the statement of work, and that such equipment is not otherwise available.

(c) The contracting officer will moreover establish that portion of the estimate which is applicable to the contractor's design, engineering, technical, and management effort in fabricating and acquiring special test equipment or other special equipment. These costs will be considered with the total estimated contract cost for purposes of determining profit or fee. The costs of general purpose items purchased as components or assembly in special test equipment or other special equipment will be excluded from such profit or fee consideration.

(d) Notwithstanding the reviews conducted in paragraph (b) of this section, the contractor will obtain the prior approval of the administrative contracting officer for each item of special test equipment or other special equipment having a value in excess of $1,000 at the time it is proposed to be fabricated or acquired.

(e) The contracting officer will assure that the contract provides for prior approval of the administrative contracting officer whenever the prime contractor proposes to fabricate or acquire any item of special test equipment or other special equipment having a value in excess of $1,000 during performance of the contract. Moreover, the contract will include a requirement for the contractor to certify with each purchase to fabrication order that (1) Based on present engineering and technical evaluation, the equipment is required within the scope of the tasks or projects under the contract, and (2) an analysis of contractor's current inventory of available equipment has been performed and neither equipment nor idle components costing in excess of $200 is available from excess or current inventories.

(f) Prior to approving procurement of any item of special test equipment or other special equipment having a value in excess of $1,000, the administrative contracting officer will assure that the contractor has screened for available items according to § 8.505 of this title and § 1008.505 of this subchapter, "Screening of Serviceable and Useable Property."

Subpart D—Industrial Facilities

Revise §§ 1013.406–1 and 1013.407(e), as follows:

§ 1013.406–1 Nondisposable nonseverable facilities.

Depreciation rates for use in agreements of the contractor to purchase nonseverable facilities according to § 13.406–1(a) of this title will not be in excess of normal depreciation rates for Federal Income Tax purposes unless specifically authorized by MCPPB, or MCPT, for ICBM or IRBM No. 1 Programs. Such purchase agreements will provide for a residual value of the facilities at not less than 20 percent of the original installed cost of the item.

§ 1013.407 Right of contractor to use.

* * * * *

(e) A rental charge for the use of facilities will normally be made at the per annum rates based on acquisition cost set forth in § 1013.3002(a)(5).

Subpart E—Contract Clauses

Revise § 1013.502 to read as follows:

§ 1013.502 Government-furnished property clause for fixed-price contracts.

Whenever contracts fall within the purview of paragraph B–102.50(c), § 1030.2 of this subchapter, and government owned parts and materials are furnished, the following will be added to the end of the third sentence of paragraph (c) of the clause in § 13.502 of this title: "except that with respect to Government property shipped the Contractor will not be required to maintain the property records prescribed by the Manual."

(a) With respect to the first sentence of paragraph (a) of the Government property clause in § 13.502 of this title, it will be the responsibility of the procuring contracting officer to specifically list the government furnished property in a schedule, or identify the specifications or appendices wherein such information is set forth.

Subpart X—Facility Expansion Procedure

In § 1013.2403–2, add the following Note between the introduction and paragraph (a):

§ 1013.2403–2 Contractor's formal application for facilities.

* * * * *

NOTE: The letter will contain only data applicable to paragraphs (k) through (r), where a preliminary application has already been furnished for the project. The supporting "Appendix" will reflect detailed requirements insofar as possible for the funding action required. Supplements to the "Appendix A's," giving the detailed breakdown of future requirements, as estimated in the letter submission, may be forwarded at a later date but should be submitted immediately upon resolution. The formal application letter should contain the following information: (Preliminary Application (a) through (j)—Formal Application (a) through (s)).

Subpart Y—Industrial Real Property—Construction, Rehabilitation, Modification and Alteration

Revise §§ 1013.2501(c), 1013.2503(e), 1013.2505(d) and 1013.2506(a), as follows:

§ 1013.2501 Applicability of subpart.

* * * * *

(c) Under the surveillance of Deputy Chief of Staff, Systems and Logistics, Hq USAF, AFSC is responsible for the overall management of the AF industrial facilities programs. Directorate of Procurement, Hq AFSC, is the responsible office. The industrial facilities activity of the cognizant AFSC division is responsible for management of the industrial facilities expansion program.

§ 1013.2503 General provisions.

* * * * *

(e) For all construction and/or building rehabilitation projects, to be accomplished at industrial facilities under a facilities contract with appropriated Government funds, the ACO may allow the contractor to proceed with construction or building rehabilitation projects only upon prior specific approval of the cognizant division. When coordination, concurrence, or approval of Hq USAF, and/or other departments or agencies of the Government are required or necessary prior to approval or release of construction and/or rehabilitation projects, the cognizant division will secure such coordination, concurrence or approval from Deputy Chief of Staff, Systems and Logistics, Hq USAF through Hq AFSC. All concurrences, coordinations, approvals, plans, or projects issued by the cognizant division, will be in writing. However, nothing herein is intended to modify the procedures established under Part 1012 of this subchapter, "Labor."

§ 1013.2505 Inspection and acceptance.

* * * * *

(d) The CMD/AFPRO having administration of the contract will monitor the accomplishment of industrial construction and rehabilitation projects, the submittal of progress reports, and acceptance of completed construction.

§ 1013.2506 Reports.

(a) CMD/AFPRO will be responsible for insuring the accomplishment and submission of industrial construction progress reports, by prime contractors to the cognizant division for all "major" construction projects.

Subpart EE—Purchase of Used Machinery or Production Equipment, is deleted.

Subpart GG is revised as follows:

Subpart GG—Providing Vehicles to AF Contractors

Sec.

1013.3300 Scope of subpart.
1013.3301 Definition.
1013.3302 Policy.
1013.3303 Lease and bailment.
1013.3304 Assignment of industrial vehicular equipment.
1013.3305 Assignment of commercial type vehicles to contractors.
1013.3306 Maintenance.
1013.3307 Restrictions and license.
1013.3308 Modification.
1013.3309 Cannibalization.
1013.3310 Operation and personnel.
1013.3312 Lease-rental of industrial vehicular equipment and/or commercial vehicles.

AUTHORITY: §§ 1013.3300 to 1013.3312 issued under sec. 8012, 70A Stat. 488; 10 U.S.C. 8012. Interpret or apply secs. 2301–2314, 70A Stat. 127–133; 10 U.S.C. 2301–2314.

§ 1013.3300 Scope of subpart.

This subpart establishes policies, assigns responsibilities, and prescribes procedures within limitations under §§ 13.102 and 13.103 of this title and §§ 1013.102 and 1013.103, for the purpose of:

(a) Providing industrial vehicular equipment to AF contractors.

(b) Providing authorization for reimbursement of AF contractors for rental of commercial type vehicles and/or industrial vehicular equipment.

§ 1013.3301 Definition.

(a) Industrial vehicular equipment is that plant equipment, as defined in § 13.101–9 of this title, that has a direct application and is justified as necessary in support of the manufacture or production of the end item, or is used in actual test programs or in research leading to the development of items that will be produced for the Air Force.

(b) Commercial type vehicles are those items of automotive equipment which have common usage in commerce, are available on the open market, and have an existing and ready resale market.

§ 1013.3302 Policy.

(a) Commercial type vehicles, except those available from Government surplus, will not be furnished to contractors. Any exceptions to this policy must have prior approval of Hq USAF.

(b) Government excess or surplus vehicles may be provided to AF contractors, where it is economical to do so and determined to be in the best interest of the Government. Vehicles provided to AF contractors from AF stocks will be screened, transferred, documented and controlled according to AFLCM 78–1.

(c) Contractors may be provided industrial vehicular equipment which is not generally available on the open market, and which does not have an existing and ready resale market. Materials handling equipment and construction equipment, which are common to the aerospace industry, are included in this category. Such equipment may be provided under an AF contract after it has been authorized in an approved Appendix "A," submitted according to § 1013.3304.

(d) Purchase of passenger-carrying automobiles by the contractor, where title to such vehicles rests in the Government under any provisions of the contract, is subject to statutory restrictions and is contrary to AF policy. Therefore, contractors will not be reimbursed for cost of acquiring passenger-carrying vehicles under such circumstances. This includes acquisition by transfer of ownership from a rental agreement, where more than 50 percent of the costs of such rental agreement are borne by the Government. In the case of vehicles acquired by a contractor for usage under a cost-reimbursement type contract, and title to which is not vested in the Government, the contractor may charge depreciation for such vehicles to the contract provided such charge is consistent with Part 15 of this title and Part 1015 of this subchapter.

§ 1013.3303 Lease and bailment.

(a) For Leasing see § 1013.3003–5(b).

(b) For Bailment see § 1013.102–50(b).

§ 1013.3304 Assignment of industrial vehicular equipment.

(a) Requests for industrial vehicular equipment under an AF contract will be submitted in a Facilities Appendix "A" according to Subpart X of this part. Such requests will state: (1) Why it is not feasible for the contractor to furnish or purchase his own equipment; (2) why the equipment cannot be economically leased or rented by the contractor; and (3) the type of utilization and complete justification for such requirement.

(b) The AFPRO or AFCMD may recommend approval to the cognizant AFSC systems division only on the following basis:

(1) That the contractor cannot provide the equipment and that such provisioning is advantageous to the Government.

(2) That the justification is both adequate and factual.

(c) Industrial vehicular equipment will be managed by the industrial facilities activity within the cognizant AFSC systems division. The responsible division will maintain a record, identified by appropriate entry number, and containing the contractor's name and location, contract number under which acquisition, transfer, or replacement is justified, type of equipment and costs. Where available, savings in cost to the Government over any other method of provisioning will be recorded. The record entry number will be used as the assignment number that is required to acquire the equipment. Transfer of equipment to another contract, or the replacement of equipment will require rejustification and the use of a new assignment number.

(d) Industrial vehicular equipment acquired under contracts other than facilities contracts, will be managed by the division which approves the facilities clause in the covering contract.

§ 1013.3305 Assignment of commercial type vehicles to contractors.

(a) Requests for commercial type vehicles, passenger-carrying and general purpose (sedans, station wagons, pick-up trucks, panel delivery, truck, truck-tractors, general purpose trailers, etc.), under facilities contracts will be submitted in the Facilities Appendix "A" according to Subpart X of this part. Unless such requests are accompanied by a Hq USAF approval, an entry, in the cost column of the Appendix "A," will state, "To be provided from Government Surplus Only." Assignment number as specified in § 1013.3304(c), is required prior to issuance of transfer document (DD Form 1149).

(b) In cases where no separate facilities contract support exists, the procuring contracting activities will obtain approval for furnishing commercial type vehicles in the same manner as that prescribed for facilities contracts. (Subpart X of this part.)

§ 1013.3306 Maintenance.

When industrial vehicular equipment and/or commercial type vehicles are provided to a contractor, the contracting officer will insert in the contract a provision requiring the contractor to maintain and repair such government-owned equipment, including normal parts replacement. See clause paragraph (e) in § 1007.2703–2 of this subchapter for guidance.

§ 1013.3307 Restrictions and license.

(a) Government-owned industrial vehicular equipment and/or commercial vehicles will not be used by contractors for unofficial purposes, including transportation of personnel between their domicile or residence and places of employment.

(b) Government license plates will not be used on government-owned vehicles provided to a contractor under the provisions of this Instruction. When license plates are required by operators of industrial equipment and/or vehicles under the State laws, the license plates will be applied for and obtained by the contractor. The ACO will assist the contractor in obtaining license plates, and will retain the government's copy of the commercial certificate of ownership in the contract files under his jurisdiction.

§ 1013.3308 Modification.

All modifications must have prior approval of the division which issued the facilities contract under which the item was provided, or the office of approval if provided under a contract other than a facilities contract.

§ 1013.3309 Cannibalization.

(a) Requests for cannibalization of nonusable equipment must carry a recommendation of an AF quality control representative that the item from which the parts will be taken is obsolete or beyond economical repair and cannibalization is justified and in the best interests of the Government. In such instances, the fully cannibalized item will be disposed of as scrap. Such cannibalization must have prior approval of the ACO and will be reported to WRAMA (WRUED).

(b) Temporary cannibalization of usable equipment will be made at the discretion of the ACO, and the vehicle from which the parts are taken will be placed in operable condition by the contractor as soon as parts can be obtained.

§ 1013.3310 Operation and personnel.

The ACO will insure that the contractor is responsible, under the contract, to comply with local laws. The contracting officer will ascertain that the contractor provides competent, careful, and conscientious operators in compliance with good commercial practice and State Safety Codes. Government operator permits will not be issued to contractor personnel.

§ 1013.3312 Lease-rental of industrial vehicular equipment and/or commercial vehicles.

(a) The contractor may request and the ACO authorize the rental or lease of industrial vehicular equipment or commercial vehicles, provided the allowance cost will not include any amount on account of leasing for a period in excess of 6 months except to the extent that such lease has been previously approved in writing by the contracting officer. Requests for periods in excess of six (6) months, or recurrent short period requests exceeding a total of 6 months, must be forwarded by the ACO to the responsible contract management region. The responsible CMR is that CMR in whose geographical area the contract is being administered.

(b) The ACO will not approve a rental action for a period in excess of 6 months until he has received prior approval from the responsible CMR. This applies to indirect charges as well as charges directly to a specific contract.

(c) Each request submitted to a CMR will contain the following:

(1) Contractor's statement why he will not, or cannot, provide with private funds.

(2) Contractor's justification for the requirement, type, and quantity required, and the costs of lease or rental.

(3) Contractor's cost comparisons demonstrating the economic advantages of commercial leasing as contrasted with purchase by the contractor for its own account.

(4) Contractor will provide the contracting officer with comparative leasing prices showing each applicable rental rate offered. A minimum of three bids are required with each action. Exceptions to this requirement must be forwarded to the responsible CMR through the buying agency and/or activity which issued the contract, against which the costs will be applied for approval of the deviation.

(5) Name and address of proposed lessor or rental agency.

(6) Recommendations and comments by the ACO on conditions connected with the action.

(d) The CMR will remain cognizant of leasing costs. Each 6 months, after comparison of experience factors with the other two CMRs, the CMR will issue a listing of basic leasing costs to all ACOs in its region.

(e) When it is considered necessary for adequate controls, the CMR may require manual coordination of the procuring activity and/or the applicable industrial facilities division.

PART 1015—CONTRACT COST PRINCIPLES AND PROCEDURES

Subpart B—Principles and Procedures for Use in Cost-Reimbursement Type Supply and Research Contracts With Commercial Organizations

Revise §§ 1015.205–16 and 1015.205–35, as follows:

§ 1015.205–16 Insurance and indemnification.

(a) No implementation.

(b)(1) Prime contract clauses with indemnity or hold harmless provisions which do not conform to those in Subchapter A, Chapter I of this title or this subchapter will not be used without prior opinion of cognizant staff judge advocate. In addition, such clauses will be coordinated with the appropriate Command headquarters staff:

AFSC—Directorate of Procurement (ASXKF), WAPAFB, Ohio.
AFLC—Directorate of Procurement and Production (MCPKP), WPAFB, Ohio.

and approval of Office of the Procurement Committee in the respective Command:

Hq AFSC (SCMK–3), Andrews AFB, Washington 25, D.C.
Hq AFLC (MCPC), WPAFB, Ohio.

and such further approvals as may be required for deviations from Subchapter A, Chapter I of this title or this subchapter pursuant to § 1.109 of this title and § 1001.109 of this subchapter.

(2) Agreements between contractors and third persons which have the effect of incurring or settling damages resulting from third party liability will not be approved without a prior opinion of the cognizant staff judge advocate as to legality and propriety of such agreements. Moreover, vouchers submitted for payment of settlement costs will likewise be referred for a prior opinion from the cognizant staff judge advocate as to legality of proposed charges unless all questions of law and legality were in effect resolved by the prior opinion of the cognizant staff judge advocate as required in subparagraph (1) of this paragraph relative to the agreement giving rise to the settlement costs.

§ 1015.205–35 Research and development costs.

(a)–(b) No implementation.

(c) Independent R&D (IR&D) effort includes the anticipated or performed work incident to study requirements defined in AFSCR 80–33 during the fiscal year and excludes: (1) R&D effort necessary to submit contract proposals, and (2) cost efficiency studies.

(d) No implementation.

(e) For the purposes of distributing development costs, the products or services of a contractor's division, department, or plant can under appropriate circumstances be considered to be one product line where the products or services are of similar use or category.

(f)–(g) No implementation.

(h) Where a contractor's business is predominantly commercial, the Air Force will normally recognize for all contract pricing purposes the Air Force's allocable portion of the contractor's independent research and development (IR&D) program and no technical evaluation or additional review is required. Recognition of an allocable share does not preclude the Air Force or the contractor from requesting a negotiation agreement on some portion of the contractor's business such as a division, department, or plant, which is predominantly Government, where independent research and/or development costs are generated and distributed only over that division, department, or plant. Where it appears the independent research and/or development costs applicable to that division, department, or plant are unreasonable, and it appears appropriate to negotiate a sharing arrangement, as provided in § 15.205–35(h) of this title, one of the following provisions may be followed: (1) AF negotiators will not enter into an agreement to accept allocable IR&D costs of specific projects without approval of AFSC, Directorate of Procurement (ASXKF), WPAFB, Ohio, (2) AF negotiators may enter into agreement on a maximum dollar limitation of costs, an allocable portion of which will be accepted by the Government provided the agreement does not obligate the Government for any sums in excess of its allowable portion or actual costs within the maximum dollar limitations whichever is less, and (3) AF negotiators may enter into an agreement to accept the allocable share of percentage of the contractor's planned research and development provided the agreement includes a maximum dollar limitation.

PART 1016—PROCUREMENT FORMS

Subpart B is revised as follows:

Subpart B—Forms for Negotiated Procurement

Sec.
1016.200 Scope of subpart.
1016.201 Request for Quotation (Standard Form 18).
1016.201–50 Instruments for use.
1016.202 Negotiated Contract Forms (DD Forms 1261 and 1270).

Sec.	
1016.203	Requests for Proposals, Amendment to Request for Proposals, Proposal and Acceptance (DD Forms 746, 746s, 746–1, 746–2).
1016.203–1	General.
1016.206	Cost and Price Analysis Forms (DD Forms 633, 633–1, 633–2, 633–3, and 633–4).
1016.206–2	DD Form 633 (Cost and Price Analysis).
1016.207	Cost and Price Analysis for Contract Price Redetermination (DD Form 784).
1016.207–50	Price Redetermination Forms (AFPI Forms 4A and 4B).
1016.207–54	Abstract Forms (AFPI Form 71).
1016.207–55	Cost Analysis Activities Report (AFPI Form 65).
1016.207–56	Request for Price Analysis (AFPI Form 4).

AUTHORITY: §§ 1016.200 to 1016.207–56 issued under sec. 8012, 70A Stat. 488; 10 U.S.C. 8012. Interpret or apply secs. 2301–2314, 70A Stat. 127–133; 10 U.S.C. 2301–2314.

§ 1016.200 Scope of subpart.

See Subpart C of this part.

§ 1016.201 Request for Quotation (Standard Form 18).

§ 1016.201–50 Instruments for use.

Pending revision of Standard Form 18, add a provision in the schedule to change paragraph (1) of "Quoter Represents:" on the face of the form to add, in line 1, immediately after "a concern that (1)" the words "is independently owned and operated."

§ 1016.202 Negotiated Contract Forms (DD Forms 1261 and 1270).

(a) *General.* Pending revision of DD Form 1261, add a provision to the schedule to change paragraph 1 of "Contractor Represents:" portion of the form as follows:

(1) Add in line 2, immediately after "a concern that (1)" the words "is independently owned and operated."

(2) Change "Part 103" in line 4 to "Part 121."

§ 1016.203 Requests for Proposals, Amendment to Request for Proposals, Proposal and Acceptance (DD Forms 746, 746s, 746–1, 746–2).

§ 1016.203–1 General.

Pending revision of DD Form 746, add a provision in the schedule to change paragraph 12 of the Terms and Conditions on the reverse of the form, as follows:

(a) Add in line 3, immediately after "a concern that (1)" the words "is independently owned and operated."

(b) Change "Part 103" in line 7 to "Part 121."

§ 1016.206 Cost and Price Analysis Forms (DD Forms 633, 633–1, 633–2, 633–3, and 633–4).

§ 1016.206–2 DD Form 633 (Cost and Price Analysis).

BMD Form 23 may be used by BMD in lieu of DD Form 633 to secure price and cost data on ballistic missile procurement.

§ 1016.207 Cost and Price Analysis for Contract Price Redetermination (DD Form 784).

§ 1016.207–50 Price Redetermination Forms (AFPI Forms 4A and 4B).

The following AFPI forms will be used as applicable according to Subpart T, Part 1003 of this title.

(a) AFPI Form 4A, "Price Redetermination Data."

(b) AFPI Form 4B, "Report of Price Redetermination Workload and Delinquent Redetermination."

§ 1016.207–54 Abstract Forms (AFPI Form 71).

See § 1003.103(c) of this subchapter.

§ 1016.207–55 Cost Analysis Activities Report (AFPI Form 65).

See § 1003.850–9 of this subchapter.

§ 1016.207–56 Request for Price Analysis (AFPI Form 4).

See § 1003.801–2 of this subchapter.

Subpart C—Purchase and Delivery Order Forms

1. A new § 1016.303–1 is added as follows:

§ 1016.303–1 General.

(a) to (1)(i) No implementation.

(ii) When this form is used in central procurements, the receiving report will be accomplished by use of DD Form 250. When the form is used as a receiving report covering base procurements utilizing "Certificate of Conformance" (§§ 1007.4014 and 1014.204–51 of this subchapter), the words "inspected and" and "that they conform to the contract requirements" may be deleted.

(b) DD Form 1155, 1155c, and 1155c–1 are available in carbon-interleaved pads, offset masters, die-impressed stencils, and hectograph masters. DD Form 1155r is available in cut sheets (blank face, preprinted backs suitable for use with reproducible masters). DD Form 1155s is available in cut sheets. The carbon-interleaved forms will be used when ten copies or less of the DD Form 1155 will suffice. When more than ten copies are required, one of the reproducible masters will be used, together with DD Form 1155r.

2. Revise § 1016.303–2 to read as follows:

§ 1016.303–2 Conditions for use.

(a) No implementation.

(b) * * *

(3) When the DD Form 1155 is used in procurements of food products, the following clause will be added when applicable. (See § 16.302 of this title.)

* * * * *

(c) No implementation.

(d) *Use as a delivery order.* (1) In addition to indefinite delivery type contracts, DD Form 1155 will be used as a delivery order against call procurement arrangements (§ 1003.409–50 of this subchapter).

(e)–(g) [Deleted]

Subpart D—Construction Contract Forms, is deleted.

Subpart E—Special Contract and Order Forms

1. Revise §§ 1016.501–1 and 1016.501–2, as follows:

§ 1016.501–1 Estimated Annual Costs of $2,400 or Less (DD Form 671).

No implementation.

(b) See Subpart V, Part 1004 of this subchapter for procedure to be used when utility services are purchased without written contract under the provisions of § 16.501–1(b) of this title.

(c) See §§ 1007.3703, 1007.3704, 1007.3705, and Subpart V, Part 1004 of this subchapter.

(d) See §§ 1007.3706, 1007.3707, 1007.3708, 1007.3709, and Subpart V, Part 1004 of this subchapter.

§ 1016.501–2 Estimated annual cost over $2,400.

When the estimated annual cost (a combined total of all metering points) of the services to be procured for an AF activity from a single utility service supplier is over $2,400, such services will be procured by a written contract. See Subpart KK, Part 1007 and Subpart V, Part 1004 of this Subchapter. Deviations from this section will be granted only under the following circumstances.

(a) When the estimated annual cost of the service does not exceed $10,000, a deviation may be granted by MCPC, Hq AFLC or SCMK–3 Hq AFSC.

(b) When the estimated annual cost of the service exceeds $10,000 and it is determined that the primary basis for refusal by the utility service supplier to execute a contract is the nonacceptance of the Nondiscrimination Clause, the request for deviation will be processed for action according to § 1012.804 of this subchapter.

(c) When the estimated annual cost of the service exceeds $10,000 and the utility service supplier refuses to execute a contract for any reason other than that outlined in paragraph (b) of this section, the request for deviation will be forwarded to the commander of the air materiel area in which the supplier is located. The commander or deputy commander of the air materiel area will personally discuss with the President, or comparable level official, of the utility service supplier, the execution and acceptance of a contract for such services.

§§ 1016.501 and 1016.504 [Amendment]

2. Delete the text from §§ 1016.501 and 1016.504.

3. Revise § 1016.505–2(a) and (c), and § 1016.505–51 to read as follows:

§ 1016.505–2 Agreements to recognize a successor in interest.

* * * * *

(a) If recognition of the voluntary assignment of a contract is determined to be consistent with the best interest of the Government, the agreement of the Government with the transferor and transferee, as prescribed in § 16.505–2(b) of this title, will include an Approval clause as described in § 7.105–2 of this title. Such agreement will then be submitted through contract reviewing channels for review by the Office of the Procurement Committee (AFLC or AFSC, as appropriate).

* * * * *

(c) If it is determined by the contracting officer that the completion of the performance of the assigned contract by the transferee would not be in the best interest of the Government, and for that reason the execution of the agreement prescribed by § 16.505–2 of this title, should not be entered into by the Government, the matter will be submitted, together with a complete statement of facts, to AMC (MCPP).

§ 1016.505–51 Procedure.

To avoid duplication of effort on the part of procuring activities in preparing and executing agreements to cover change of name, transfer of business, and corporate mergers, only one supplemental agreement will be prepared to effect necessary changes for all contracts between the applicable AF activities and the contractor involved. Procurement Division (MCPP), Hq AMC, will designate the procuring activity that will be responsible for all necessary and appropriate action in respect to either recognizing or not recognizing successors in interest, including without limitation: (a) Obtaining from the contractor a list of the affected contracts, the names and addresses of the AF activities responsible for these contracts, and the required documentary evidence, and (b) drafting and executing a supplemental agreement to one of the contracts affected but covering all applicable outstanding and incomplete AF contracts affected by the transfer of asset or change of name, and (c) instituting and monitoring procedures for security clearance. Additionally, by mutual agreement with the Departments of the Army and Navy, MCPP will coincidentally with such designation of the responsible procuring activity, advise the office designated by such Departments of the reported action, and the procuring activity so designated. A supplemental agreement number need not be obtained for contracts other than the one under which the supplemental agreement is written. Where necessary, an exhibit will be attached to the contract, listing the numbers of the affected contracts and the names and addresses of the AF officer responsible for the affected contracts.

(Sec. 8012, 70A Stat. 488; 10 U.S.C. 8012. Interpret or apply secs. 2301–2314, 70A Stat. 127–133; 10 U.S.C. 2301–2314)

By order of the Secretary of the Air Force.

William L. Koch,
Lieutenant Colonel, U.S. Air Force, Chief, Special Activities Group, Office of The Judge Advocate General.

[F.R. Doc. 63–4632; Filed, May 1, 1963; 8:45 a.m.]

Title 43—PUBLIC LANDS: INTERIOR

Chapter I—Bureau of Land Management, Department of the Interior

SUBCHAPTER I—HOMESTEADS

[Circular 2102]

PART 166—ORIGINAL, ADDITIONAL, SECOND, AND ADJOINING FARM HOMESTEADS, AUTHORIZED BY THE GENERAL PROVISIONS OF THE HOMESTEAD LAWS

Cultivation

The purpose of this amendment is to clarify the requirements for cultivation under the homestead laws and to emphasize the necessity for the entryman to proceed in a manner reasonably calculated to produce profitable results.

Although the Department of the Interior customarily observes the rule making requirements voluntarily, that procedure is not followed in this case since the changes being made are merely a clarification and expansion of present regulations. The principle has already been announced in Departmental decision U.S. v. Charles E. Stewart, A–28966, September 25, 1962.

This amendment shall become effective on publication in the Federal Register.

Section 166.23(a) is amended to read as follows:

§ 166.23 Cultivation required for 3-year proof.

(a) Cultivation of the land in a manner reasonably calculated to produce profitable results is required for a period of at least 2 years. This must consist of actual breaking of the soil, followed by planting, sowing of seed, tillage for a crop other than native grasses, and, in areas where rainfall is inadequate, the application of such amounts of water as may reasonably be required to produce a crop. However, tilling of the land, or other appropriate treatment, for the purpose of conserving the moisture with a view of making a profitable crop the succeeding year, will be deemed cultivation within the terms of the act (without sowing of seed) where that manner of cultivation is necessary or generally followed in the locality.

Stewart L. Udall,
Secretary of the Interior.

April 25, 1963.

[F.R. Doc. 63–4649; Filed, May 1, 1963; 8:47 a.m.]

SUBCHAPTER Q—RECLAMATION AND IRRIGATION

[Circular 2103]

PART 232—DESERT LAND ENTRIES

Evidence of Water Rights

The purpose of this amendment is to provide alternative requirements for desert land applicants in any State which does not grant water rights or permits until classification of lands as proper for desert land entry or before allowance of entry. The amendment provides more flexibility by giving the land office manager the alternative to reject a defective application or to require additional evidence.

Although the Department of the Interior customarily observes the rule making requirements voluntarily, that procedure is not followed in this case, since the changes being made are to permit applicants to accommodate to State procedures.

This amendment shall become effective on publication in the Federal Register.

Section 232.13 is amended to read as follows:

§ 232.13 Evidence of water rights required with application.

No desert-land application will be allowed unless accompanied by evidence satisfactorily showing either that the intending entryman has already acquired by appropriation, purchase, or contract a right to the permanent use of sufficient water to irrigate and reclaim all of the irrigable portion of the land sought, or that he has initiated and prosecuted, as far as then possible, appropriate steps looking to the acquisition of such a right, or, in States where no permit or right to appropriate water is granted until the land embraced within the application is classified as suitable for desert-land entry or the entry is allowed, a showing that the applicant is otherwise qualified under State law to secure such permit or right. If applicant intends to procure water from an irrigation district, corporation, or association, but is unable to obtain a contract for the water in advance of the allowance of his entry, then he must furnish, in lieu of the contract, some written assurance from the responsible officials of such district, corporation, or association that, if his entry be allowed, applicant will be able to obtain from that source the necessary water. The manager will examine the evidence submitted in such applications and either reject defective applications or require additional evidence.

Stewart L. Udall,
Secretary of the Interior.

April 25, 1963.

[F.R. Doc. 63–4650; Filed, May 1, 1963; 8:47 a.m.]

APPENDIX—PUBLIC LAND ORDERS

[Public Land Order 3041]

[Anchorage 058317]

ALASKA

Partly Revoking Departmental Order of December 27, 1939, Which Established Air Navigation Site No. 130

By virtue of the authority vested in the President and pursuant to Executive Order No. 10355 of May 26, 1952, and by virtue of the authority contained in section 4 of the Act of May 24, 1928 (45 Stat. 729; 49 U.S.C. 214), it is ordered as follows:

1. The Departmental order of December 27, 1939, which created Air Navigation Site No. 130, and the Departmental order of March 20, 1942, and Public Land Order No. 2713 of June 26, 1962, which withdrew lands as additions thereto, are hereby revoked so far as they affect the following described lands:

TALKEETNA

SEWARD MERIDIAN

T. 26 N., R. 4 W.,
  Sec. 19, SE¼SW¼SE¼ and E½NE¼SW¼SE¼;
  Sec. 30, NE¼NW¼NE¼, E½NW¼NW¼NE¼, S½NW¼NE¼, E½NE¼SE¼NW¼, SE¼SE¼NW¼, NE¼NE¼SW¼, E½NW¼NE¼SW¼, S½NE¼SW¼, and SW¼SE¼;
  Sec. 31, W½NW¼NE¼.
T. 26 N., R. 5 W.,
  U.S. Survey 1260.
  Block 26, lots 3 and 4.

Containing 161.424 acres.

2. The lands are located in the immediate vicinity of Talkeetna, Alaska, about 75 air miles north of Anchorage. They support a heavy growth of white birch, with some intermingling of spruce.

3. Until 10:00 a.m. on July 26, 1963, the State of Alaska shall have a preferred right to select the lands as provided by the Act of July 28, 1956 (70 Stat. 709; 48 U.S.C. 46–3b), and section 6(g) of the Alaska Statehood Act of July 7, 1958 (72 Stat. 339), and the regulations in 43 CFR Part 76.

4. This order shall not otherwise become effective to change the status of the lands until 10:00 a.m. on July 26, 1963. At that time, the lands shall be open to the operation of the public land laws generally, subject to valid existing rights, the provisions of existing withdrawals, and the requirements of applicable law. All valid applications received at or prior to 10:00 a.m. on July 26, 1963, shall be considered as simultaneously filed at that time.

Inquiries shall be addressed to the Manager, Land Office, Bureau of Land Management, Anchorage, Alaska.

JOHN A. CARVER, Jr.,
Assistant Secretary of the Interior.

APRIL 26, 1963.

[F.R. Doc. 63–4674; Filed, May 1, 1963; 8:50 a.m.]

[Public Land Order 3042]

[Idaho 013874]

IDAHO

Partly Revoking Reclamation Withdrawals (Gooding Project)

By virtue of the authority contained in section 3 of the Act of June 17, 1902 (32 Stat. 388; 43 U.S.C. 416), it is ordered as follows:

1. The Departmental order of October 22, 1925, and any other order or orders which withdrew lands of reclamation purposes under the Act of June 17, 1902, supra, are hereby revoked so far as they affect the following described land:

BOISE MERIDIAN

T. 9 S., R. 20 E.,
  Sec. 19, lot 7.

Containing 28.27 acres.

2. The land is located about two miles northeast of Eden, Idaho. The surface is rolling with several rough lava rock outcrops. The soil is a light sandy loam, supporting vegetation consisting chiefly of cheat grass with some perennial grasses, weeds and scattered brush.

3. At 10:00 a.m. on June 1, 1963, the land released from withdrawal by this order shall be open to the operation of the public land laws generally, including the mining laws, subject to valid existing rights, the provisions of existing withdrawals, and the requirements of applicable law. All valid applications received at or prior to 10:00 a.m. on June 1, 1963, shall be considered as simultaneously filed at that time.

4. The State of Idaho has waived its preference right of application granted by the Act of August 27, 1958 (72 Stat. 928; 43 U.S.C. 851, 852).

JOHN A. CARVER, Jr.,
Assistant Secretary of the Interior.

APRIL 26, 1963.

[F.R. Doc. 63–4675; Filed, May 1, 1963; 8:50 a.m.]

[Public Land Order 3043]

[Los Angeles 0153232–A]

CALIFORNIA

Partly Revoking Public Water Reserve No. 14

By virtue of the authority vested in the President by section 1 of the Act of June 25, 1910 (36 Stat. 847; 43 U.S.C. 141), and pursuant to Executive Order No. 10355 of May 26, 1952, it is ordered as follows:

1. The Executive order of January 24, 1914, creating Public Water Reserve No. 14, California No. 2, so far as it affects the following described land, is hereby revoked:

SAN BERNARDINO MERIDIAN

T. 3 S., R. 5 E.,
  Sec. 28, W½NE¼ and E½NW¼.

Containing 160 acres.

2. The lands are located four air miles north of Palm Springs, California. Access is poor. The topography is almost level to slightly undulating. Soils are heavy clay loam, deep sandy loam, and sand. Vegetation consists primarily of acacia stands, greasewood, salt grass, and several palm trees.

3. Until 10:00 a.m. on October 25, 1963, the State of California shall have a preferred right of application to select the lands as provided by subsection (c) of section 2 of the Act of August 27, 1958 (72 Stat. 928; 43 U.S.C. 852). On and after that date and hour the lands shall become subject to application, petition, location, and selection generally, subject to valid existing rights, the provisions of existing withdrawals, and the requirements of applicable law. All valid applications except preference right applications from the State, received at or prior to 10:00 a.m. on June 1, 1963, shall be considered as simultaneously filed at that time.

4. The lands have been open to applications and offers under the mineral leasing laws, and to location for metalliferous minerals. They will be open to location for nonmetalliferous minerals beginning at 10:00 a.m. on October 25, 1963.

Inquiries concerning the lands shall be addressed to the Manager, Land Office, Bureau of Land Management, Riverside, California.

JOHN A. CARVER, Jr.,
Assistant Secretary of the Interior.

APRIL 26, 1963.

[F.R. Doc. 63–4676; Filed, May 1, 1963; 8:50 a.m.]

[Public Land Order 3044]

[Sacramento 061992]

CALIFORNIA

Power Site Restoration No. 564; Partly Revoking Power Site Reserve and Reclamation Withdrawal (Power Site Reserve No. 453)

By virtue of the authority vested in the President by section 1 of the Act of June 25, 1910 (36 Stat. 847; 43 U.S.C. 141), and pursuant to Executive Order No. 10355 of May 26, 1952, and by virtue of the authority contained in section 3 of the Act of June 17, 1902 (32 Stat. 388; 43 U.S.C. 416), and in section 24 of the Federal Power Act of June 10, 1920 (41 Stat. 1075; 16 U.S.C. 818), as amended, and pursuant to the determination of the Federal Power Commission, docketed as DA–975–California, it is ordered as follows:

1. The Executive order of September 5, 1914, creating Power Site Reserve No. 453, and the Departmental order of September 14, 1942, which withdrew the land for reclamation purposes, are hereby revoked so far as they affect the following described land:

MOUNT DIABLO MERIDIAN

T. 12 N., R. 9 E.,
  Sec. 34, W½SE¼SW¼.

Containing approximately 20 acres.

2. In DA–975–California, the Federal Power Commission vacated the existing power withdrawals created pursuant to the filing of applications for preliminary permits for proposed Projects Nos. 2176 and 2193, pertaining to the land described in paragraph 1, hereof.

3. Subject to any valid existing rights, the requirements of applicable law, and the provisions of any existing withdrawals, the lands are hereby opened to filing of applications, selections, and locations in accordance with the following:

(a) Until 10:00 a.m. on October 25, 1963, the State of California shall have (1) a preferred right of application to select the lands in accordance with subsection (c) of section 2 of the Act of August 27, 1958 (72 Stat. 928; 43 U.S.C. 851, 852), and (2) a preferred right to apply for the reservation to the State or to any of its political subdivisions under any statute or regulation applicable thereto, of any of the lands required for a right-of-way for a public highway or as a source of materials for the construction and maintenance of such highways, in accordance with the provisions of section 24 of the Federal Power Act, supra.

(b) All valid applications and selections under the nonmineral public land laws other than preference right applications from the State of California presented at or prior to 10:00 a.m. on July 26, 1963, will be considered as simultaneously filed at that hour. Rights under such applications and selections filed after that hour will be governed by the time of filing.

4. The land has been open to applications and offers under the mineral leasing laws. It will be open to location under the United States mining laws at 10:00 a.m. on October 25, 1963.

5. Persons claiming preference rights based upon valid settlement, statutory preference, or equitable claims, must enclose properly corroborated statements in support of their applications, setting forth all facts relevant to their claims.

Inquiries concerning the lands should be addressed to the Manager, Land Office, Bureau of Land Management, Sacramento, California.

John A. Carver, Jr.,
Assistant Secretary of the Interior.

April 26, 1963.

[F.R. Doc. 63-4677; Filed, May 1, 1963; 8:50 a.m.]

[Public Land Order 3045]

CALIFORNIA

Partly Revoking Reclamation Withdrawal, Truckee-Carson Project; Correcting Public Land Order No. 2904 of January 29, 1963

By virtue of the authority contained in section 3 of the Act of June 17, 1902 (32 Stat. 388; 43 U.S.C. 416), it is ordered as follows:

1. The Departmental order of October 28, 1908, which withdrew lands for reclamation purposes in connection with the Truckee-Carson Project, is hereby revoked so far as it affects the following described lands:

(Sacramento 074609)

Mount Diablo Meridian

T. 16 N., R. 18 E.,
  Sec. 6, lots 1, 2, and 6 to 21, incl.

The area described contains approximately 701 acres.

2. The lands are part of the Tahoe National Forest. At 10:00 a.m. on June 1, 1963, they shall be open to such forms of disposition as may by law be made of national forest lands.

(Los Angeles 0166908)

3. Paragraph 1c. of Public Land Order No. 2904 issued January 29, 1963, so far as it describes lands in T. 5 N., R. 2 W., San Bernardino Meridian, is corrected to read "T. 5 N., R. 12 W."

John A. Carver, Jr.,
Assistant Secretary of the Interior.

April 26, 1963.

[F.R. Doc. 63-4651; Filed, May 1, 1963; 8:47 a.m.]

[Public Land Order 3046]

[Sacramento 061531]

CALIFORNIA

Partly Revoking Stock Driveway Withdrawal No. 161, California No. 11

By virtue of the authority contained in section 10 of the Act of December 29, 1916 (39 Stat. 865; 43 U.S.C. 300), as amended, it is ordered as follows:

1. The Departmental order of October 30, 1922, creating Stock Driveway Withdrawal No. 161, California No. 11, is hereby revoked so far as it affects the following described lands:

Mount Diablo Meridian

T. 35 N., R. 2 E.,
  Sec. 30, SE¼SW¼.
T. 35 N., R. 4 E.,
  Sec. 6, W½SW¼, SE¼SW¼, and W½SE¼;
  Sec. 7, lot 1.
T. 36 N., R. 5 E.,
  Sec. 6. W½SE¼.
T. 33 N., R. 2 W.,
  Sec. 22, E½ and E½W½.

The areas described aggregate approximately 832 acres.

2. The lands are located in Shasta County, near Redding and Burney, California. They are in general, rough and steep, part containing merchantable timber. The lands in T. 36 N., R. 5 E., are withdrawn by Public Land Order No. 2460 of August 11, 1961, for the Cinder Cone National Cooperative Land and Wildlife Management Area.

3. Until 10:00 a.m. on October 25, 1963, the State of California shall have a preferred right of application to select the public lands as provided by subsection (c) of section 2 of the Act of August 27, 1958 (72 Stat. 928; 43 U.S.C. 851, 852). On and after that date and hour the lands shall become subject to application, petition, location, and selection generally, subject to valid existing rights, the provisions of existing withdrawals, and the requirements of applicable law. All valid applications except preference right applications from the State, received at or prior to 10:00 a.m. on June 1, 1963, shall be considered as simultaneously filed at that time. The lands have been open to applications and offers under the mineral leasing laws, and to mining location subject to the regulations in 43 CFR 185.35.

Inquiries should be addressed to the Manager, Land Office, Bureau of Land Management, Sacramento, California.

John A. Carver, Jr.,
Assistant Secretary of the Interior.

April 26, 1963.

[F.R. Doc. 63-4652; Filed, May 1, 1963; 8:47 a.m.]

Title 33—NAVIGATION AND NAVIGABLE WATERS

Chapter II—Corps of Engineers, Department of the Army

PART 211—REAL ESTATE ACTIVITIES OF THE CORPS OF ENGINEERS IN CONNECTION WITH CIVIL WORKS PROJECTS

Sale of Lands in Reservoir Areas Under Jurisdiction of Department of Army for Cottage Site Development and Use

Section 211.81 is added, to read as follows:

§ 211.81 Reservoir areas.

Delegations, rules and regulations in §§ 211.71 to 211.80 are applicable to:

(a) Fort Gibson Reservoir Area, Oklahoma.

(b) Lake Texoma and the Denison Reservoir Area, Oklahoma and Texas.

(c) Tenkiller Ferry Reservoir Area, Oklahoma.

(d) Harlan County Reservoir Area, Nebraska.

(e) Fort Randall Reservoir Area, South Dakota.

(f) Garrison Reservoir Area, North Dakota.

(g) Kanopolis Reservoir Area, Kansas.

(h) Arkabutla Reservoir Area, Mississippi.

(i) Enid Reservoir Area, Mississippi.

(j) Sardis Reservoir Area, Mississippi.

(k) Narrows Reservoir Area, Arkansas.

(l) Wappapello Reservoir Area, Missouri.

(m) Norfork Reservoir Area, Arkansas and Missouri.

(n) Clark Hill Reservoir Area, Georgia and South Carolina.

(o) Alatoona Reservoir Area, Georgia.

(p) Center Hill Reservoir Area, Tennessee.

(q) Dale Hollow Reservoir Area, Tennessee.

(r) Lake Cumberland, Kentucky.

[Regs., April 23, 1963, ENGRE-MI] (Sec. 2, 70 Stat. 1065; 16 U.S.C. 460f)

J. C. Lambert,
Major General, U.S. Army,
The Adjutant General.

[F.R. Doc. 63-4642; Filed, May 1, 1963; 8:45 a.m.]

Title 50—WILDLIFE AND FISHERIES

Chapter I—Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, Department of the Interior

PART 33—SPORT FISHING

Horicon National Wildlife Refuge, Wisconsin

The following special regulation is issued and is effective on date of publication in the Federal Register.

§ 33.5 Special regulations; sport fishing; for individual wildlife refuge areas.

WISCONSIN

HORICON NATIONAL WILDLIFE REFUGE

Sport fishing on the Horicon National Wildlife Refuge, Wisconsin, is permitted only on the areas designated by signs as open to fishing. These open areas, comprising 32 acres or 0.3 percent of the total water area of the refuge, are delineated on a map available at the refuge headquarters and from the office of the Regional Director, Bureau of Sport Fisheries and Wildlife, 1006 West Lake Street, Minneapolis 8, Minnesota. Sport fishing is subject to the following conditions:

(a) Species permitted to be taken: Northern pike, bullheads, and other minor species permitted by State regulations.

(b) Open season: May 4, 1963, through September 30, 1963, daylight hours only.

(c) Daily creel limits: Northern pike—5; bullheads—no limit; other minor species limits as prescribed by State regulations.

(d) Methods of fishing:

(1) No more than two lines or two poles with one line attached to each pole, and with one hook or bait on each line, may be used for fishing, except that fishermen using only one line or one pole with one line attached thereto may use not more than two lures or two hooks.

(2) No snag hook, snag line or snag pole may be used to take fish.

(3) One dip net per person may be used for the taking, catching or killing of rough fish, except suckers.

(4) The use of boats is prohibited.

(5) See State regulations for additional details.

(e) Other provisions:

(1) The provisions of this special regulation supplement the regulations which govern fishing on wildlife refuge areas generally which are set forth in Title 50, Code of Federal Regulations, Part 33.

(2) A Federal permit is not required to enter the public fishing area.

(3) The provisions of this special regulation are effective to October 1, 1963.

R. W. BURWELL,
Regional Director, Bureau of Sport Fisheries and Wildlife.

APRIL 25, 1963.

[F.R. Doc. 63-4673; Filed, May 1, 1963; 8:50 a.m.]

PART 33—SPORT FISHING

Seney National Wildlife Refuge, Michigan

The following special regulation is issued and is effective on date of publication in the FEDERAL REGISTER.

§ 33.5 Special regulations; sport fishing; for individual wildlife refuge areas.

MICHIGAN

SENEY NATIONAL WILDLIFE REFUGE

Correction

In the special regulations published in the FEDERAL REGISTER, Volume 28, Issue Number 76, page 3773–4, on April 18, 1963, paragraph (d) Methods of fishing, part (1) should read as follows:

(1) Two lines under immediate control, having a total of not more than four (4) hooks on all lines baited with natural or artificial bait, may be used for still fishing, casting or trolling. All hooks, single, double or treble pointed, attached to a manufactured artificial bait counted as one hook.

R. W. BURWELL,
Regional Director, Bureau of Sport Fisheries and Wildlife.

APRIL 25, 1963.

[F.R. Doc. 63-4647; Filed, May 1, 1963; 8:46 a.m.]

PART 33—SPORT FISHING

Sand Lake National Wildlife Refuge, South Dakota

The following special regulation is issued and is effective on date of publication in the FEDERAL REGISTER.

§ 33.5 Special regulations; sport fishing; for individual wildlife refuge areas.

SOUTH DAKOTA

SAND LAKE NATIONAL WILDLIFE REFUGE

Sport fishing on the Sand Lake National Wildlife Refuge, South Dakota, is permitted only on the areas designated by signs as open to fishing. These open areas, comprising 150 acres or 5 percent of the total water area of the refuge, are delineated on a map available at the refuge headquarters and from the office of the Regional Director, Bureau of Sport Fisheries and Wildlife, 1006 West Lake Street, Minneapolis 8, Minnesota. Sport fishing is subject to the following conditions:

(a) Species permitted to be taken: Bullheads, northern pike and other minor species permitted by State regulations.

(b) Open season: May 15, 1963, through September 15, 1963; daylight hours only.

(c) Daily creel limits: Bullheads—50; Northern pike—6. Creel limits for other minor species are as prescribed by State regulations.

(d) Methods of fishing:

(1) Anglers may use a maximum of 2 lines, and a maximum of 3 hooks on each line.

(2) The use of boats is not permitted.

(3) See State regulations for additional details.

(e) Other provisions:

(1) The provisions of this special regulation supplement the regulations which govern fishing on wildlife refuge areas generally which are set forth in Title 50, Code of Federal Regulations, Part 33.

(2) A Federal permit is not required to enter the public fishing area.

(3) The provisions of this special regulation are effective to September 16, 1963.

R. W. BURWELL,
Regional Director, Bureau of Sport Fisheries and Wildlife.

APRIL 24, 1963.

[F.R. Doc. 63-4648; Filed, May 1, 1963; 8:46 a.m.]

Proposed Rule Making

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[50 CFR Part 10]

MIGRATORY BIRDS

Notice of Proposed Rule Making

Notice is hereby given that pursuant to authority contained in section 3 of the Migratory Bird Treaty Act of July 3, 1918, as amended (40 Stat. 755; 16 U.S.C. 704), it is proposed to amend Part 10, Title 50, Code of Federal Regulations. Based on the results of migratory game birds studies now in progress and having due consideration for any views or data submitted by interested parties, these amendments will specify open seasons, certain closed seasons, hunting methods, shooting hours, bag and possession limits, and possession, importation, and transportation controls for migratory game birds.

Amendments specifying open seasons, bag and possession limits, and shooting hours for doves and pigeons in Puerto Rico and the Virgin Islands will be proposed for final adoption not later than June 1, 1963, to become effective on or about July 1, 1963. Amendments specifying open seasons, bag and possession limits, and shooting hours for doves, pigeons, rails (except coot), woodcock, Wilson's snipe, waterfowl and coot in Alaska, and certain sea ducks in coastal waters along certain northeastern States will be proposed for final adoption not later than August 1, 1963, to become effective on or about September 1, 1963. Amendments specifying open seasons, bag and possession limits, and shooting hours for waterfowl, coots, cranes, and other migratory game birds not previously adopted will be proposed for final adoption not later than September 1, 1963, to become effective on or about October 1, 1963.

At the present time an amendment to § 10.2 of the regulations is being proposed as set forth below. The purpose of the proposal is merely to add a definition of the term "Personal abode" in the interests of explanation and clarification. The proposed amendment will not change the application of the regulations in any way.

It is the policy of the Department of the Interior, whenever practicable, to afford the public an opportunity to participate in the rule making process. Accordingly, interested persons may submit their written comments, suggestions, or objections with respect to the proposed amendment set forth below to the Director, Bureau of Sport Fisheries and Wildlife, Washington 25, D.C., within thirty days of the date of publication of this notice in the FEDERAL REGISTER.

Section 10.2 is amended by adding a new paragraph (m) to read as follows:

§ 10.2 Definitions of terms.

* * * * *

(m) *Personal abode.* One's principal or ordinary home or dwelling place, as distinguished from his temporary or transient place of abode or dwelling such as a hunting club, or any club house, cabin, tent or trailer house used as a hunting club, or any hotel, motel, or rooming house used during a hunting, pleasure, or business trip.

FRANK P. BRIGGS,
Assistant Secretary of the Interior.

APRIL 29, 1963.

[F.R. Doc. 63-4663; Filed, May 1, 1963; 8:48 a.m.]

FEDERAL AVIATION AGENCY

[14 CFR Part 71 [New]]

[Airspace Docket No. 62-CE-68]

CONTROL ZONES, CONTROL AND TRANSITION AREAS

Proposed Alteration; Revocation, Extension and Designation

Pursuant to the authority delegated to me by the Administrator (14 CFR 11.65), notice is hereby given that the Federal Aviation Agency is considering amendments to Part 71 [New] of the Federal Aviation Regulations, the substance of which is stated below.

The St. Louis, Mo., control zone is presently designated within a 5-mile radius of Lambert-St. Louis Municipal Airport (latitude 38°44′50″ N., longitude 90°21′55″ W.); within 2 miles either side of the St. Louis ILS localizer northeast course extending from the 5-mile radius zone to 5 miles northeast of the LOM; within 2 miles either side of the ILS localizer southwest course extending from the 5-mile radius zone to 10 miles southwest of the Lake RBN, and within 2 miles either side of the St. Louis VORTAC 323° and 143° True radials extending from the 5-mile radius zone to 10 miles northwest of the VORTAC. The Belleville, Ill., control zone is presently designated within a 5-mile radius of Scott AFB (latitude 38°32′32″ N., longitude 89°51′30″ W.), and within 2 miles either side of the 317° True bearing from the Belleville RBN extending from the 5-mile radius zone to the RBN. The St. Louis, Mo., control area extension is presently designated within a 25-mile radius of Lambert Field (latitude 38°44′50″ N., longitude 90°21′52″ W.), excluding the portion within the Belleville, Ill., control area extension. The Hardin, Ill., transition area is presently designated as that airspace extending upward from 2,500 feet m.s.l., bounded on the east by longitude 90°22′00″ W., on the south and southwest by V-210 north alternate and on the north and northwest by the arc of a 33-mile radius circle centered on Lambert Field. The Richwoods, Mo., transition area is presently designated as that airspace extending upward from 1,200 feet above the surface within 8 miles northwest and 12 miles southeast of the Richwoods VOR 230° and 054° True radials extending from 9 miles northeast to 45 miles southwest of the VOR.

To implement the provisions of Amendments 60-21 (26 F.R. 570) and 60-29 (27 F.R. 4012) to the Civil Air Regulations, Part 60, Air Traffic Rules in the greater St. Louis terminal area, the Federal Aviation Agency has under consideration the following airspace actions:

1. Alter the St. Louis, Mo., control zone by designating it within a 5-mile radius of the Lambert-St. Louis Municipal Airport (latitude 38°44′50″ N., longitude 90°21′55″ W.), within 2 miles southeast and 3 miles northwest of the ILS localizer southwest course extending from the 5-mile radius zone to 12 miles southwest of the Lake RBN, and within 2 miles each side of the St. Louis VORTAC 142° True radial extending from the 5-mile radius zone to 7 miles northwest of the approach end of Runway 12.

2. Alter the Belleville, Ill., control zone by designating it within a 5-mile radius of Scott AFB, Belleville, Ill. (latitude 38°32′32″ N., longitude 89°51′30″ W.), and within 2 miles each side of the Belleville RBN 317° True bearing, extending from the 5-mile radius zone to 5.5 miles southeast of the approach end of Runway 31.

3. Revoke the St. Louis, Mo., control area extension and the Hardin, Ill., transition area.

4. Redesignate the Richwoods, Mo., transition area as that airspace extending upward from 1,200 feet above the surface within 8 miles northwest and 12 miles southeast of the Richwoods VOR 230° and 054° True radials, extending from 9 miles northeast to 45 miles southwest of the VOR, and the airspace northwest of the Richwoods VOR bounded on the east by V-426, on the south by V-88 and on the west by V-14 south alternate.

5. Designate the St. Louis, Mo., transition area as that airspace extending upward from 700 feet above the surface within a 10-mile radius of the Lambert-St. Louis Municipal Airport (latitude 38°44′50″ N., longitude 90°21′55″ W.), within 5 miles southeast and 8 miles northwest of the St. Louis ILS localizer northeast course extending from the 10-mile radius area to 12 miles northeast of the OM, within a 5-mile radius of Civic Memorial Airport, Alton, Ill. (latitude 38°53′28″ N., longitude 90°03′02″ W.), within 2 miles each side of the 009° True bearing from the Civic Memorial Airport, extending from the 5-mile radius area to 7 miles north of the airport, and within 5 miles south and 8 miles north of the 103° True bearing from the Civic Memorial Airport, extending from the 5-mile radius area to 12 miles east of the airport; that airspace extending upward

from 1,200 feet above the surface within a 33-mile radius of the Lambert-St. Louis Municipal Airport; within 6 miles southwest and 9 miles northeast of the St. Louis VORTAC 328° True radial, extending from the 33-mile radius area to 36 miles northwest of the VORTAC, within a 40-mile radius of Scott AFB, and within 5 miles west and 8 miles east of the 009° True bearing from the Civic Memorial Airport, extending from the airport to 19 miles north of the airport, excluding the airspace within the Richwoods, Mo., Jacksonville, Ill., and Vandalia, Ill., transition areas and the portion within a 13-mile radius of the Centralia, Ill., VOR.

6. Designate the Belleville, Ill., transition area as that airspace extending upward from 700 feet above the surface within a 7-mile radius of Scott AFB, Belleville, Ill. (latitude 38°32′32″ N., longitude 89°51′30″ W.), and within 2 miles each side of the Belleville RBN 317° True bearing, extending from the 7-mile radius area to the RBN.

The actions proposed herein would, in part, reduce the over-all size of the presently designated control zones at St. Louis and Belleville (Scott AFB). Additionally, the floor of controlled airspace beyond irregularly configured areas within a 10 to 17-mile radius of St. Louis Municipal Airport, within a 5 to 12-mile radius of the Civic Memorial Airport, and within a 7-mile radius of Scott AFB would be raised from 700 to 1,200 feet. The portions of airspace released by this action would become available for other aeronautical purposes. The portions of controlled airspace retained would provide protection for aircraft executing prescribed holding, arrival, departure and radar vectoring procedures within the greater St. Louis terminal area. Certain minor revisions to prescribed instrument procedures would accompany the actions proposed herein, but operational complexities would not be introduced nor would aircraft performance characteristics or established landing minimums be adversely affected.

Specific details of the changes to procedures and minimum flight rule altitudes that would be required may be examined by contacting the Chief, Airspace Utilization Branch, Air Traffic Division, Central Region, Federal Aviation Agency, 4825 Troost Avenue, Kansas City 10, Mo.

Interested persons may submit such written data, views or arguments as they may desire. Communications should be submitted in triplicate to the Assistant Administrator, Central Region, Attn: Chief, Air Traffic Division, Federal Aviation Agency, 4825 Troost Avenue, Kansas City 10, Mo. All communications received within thirty days after publication of this notice in the FEDERAL REGISTER will be considered before action is taken on the proposed amendment. No public hearing is contemplated at this time, but arrangements for informal conferences with Federal Aviation Agency officials may be made by contacting the Regional Air Traffic Division Chief, or the Chief, Airspace Utilization Division, Federal Aviation Agency, Washington 25, D.C. Any data, views or arguments presented during such conferences must also be submitted in writing in accordance with this notice in order to become part of the record for consideration. The proposal contained in this notice may be changed in the light of comments received.

The official Docket will be available for examination by interested persons at the Docket Section, Federal Aviation Agency, Room A-103, 1711 New York Avenue NW., Washington 25, D.C. An informal Docket will also be available for examination at the office of the Regional Air Traffic Division Chief.

This amendment is proposed under section 307(a) of the Federal Aviation Act of 1958 (72 Stat. 749; 49 U.S.C. 1348).

Issued in Washington, D.C., on April 25, 1963.

CLIFFORD P. BURTON,
Chief, Airspace Utilization Division.

[F.R. Doc. 63-4640; Filed, May 1, 1963; 8:45 a.m.]

[14 CFR Part 71 [New]]

[Airspace Docket No. 63-CE-39]

FEDERAL AIRWAYS AND ASSOCIATED CONTROL AREAS

Proposed Alteration

Notice is hereby given that the Federal Aviation Agency is considering amendments to Part 71 [New] of the Federal Aviation Regulations, the substance of which is stated below.

VOR Federal airways Nos. 2 south alternate, 193 and 274 are designated in part via the Grand Rapids, Mich., Kent County Airport ILS outer marker. This facility is being relocated to a site at latitude 42°53′43″ N., longitude 85°22′53″ W., to serve the new Cascade Airport. Accordingly, it is proposed to alter Victors 2, 193 and 274 as follows to accommodate revised traffic control procedures for the Grand Rapids area:

1. Realign Victor 2 south alternate from Muskegon, Mich., to Lansing, Mich., via the intersection of Muskegon 137° and Lansing 277° True radials.
2. Realign Victor 193 from Pullman, Mich., via the intersection of Pullman 029° and White Cloud, Mich., 176° True radials; to White Cloud.
3. Realign Victor 274 from Pullman via the intersection of Pullman 051° and Saginaw, Mich., 237° True radials; to Saginaw.

The Muskegon control area extension is bounded in part by Victor 2 and Victor 193. The Lansing control area extension is bounded in part by Victor 193. These control area boundaries are so designated that they would automatically move with the relocated airways.

Interested persons may submit such written data, views or arguments as they may desire. Communications should be submitted in triplicate to the Assistant Administrator, Central Region, Attn: Chief, Air Traffic Division, Federal Aviation Agency, 4825 Troost Avenue, Kansas City 10, Mo. All communications received within forty-five days after publication of this notice in the FEDERAL REGISTER will be considered before action is taken on the proposed amendment. No public hearing is contemplated at this time, but arrangements for informal conferences with Federal Aviation Agency officials may be made by contacting the Regional Air Traffic Division Chief, or the Chief, Airspace Utilization Division, Federal Aviation Agency, Washington 25, D.C. Any data, views or arguments presented during such conferences must also be submitted in writing in accordance with this notice in order to become part of the record for consideration. The proposal contained in this notice may be changed in the light of comments received.

The official Docket will be available for examination by interested persons at the Docket Section, Federal Aviation Agency, Room A-103, 1711 New York Avenue NW., Washington 25, D.C. An informal Docket will also be available for examination at the office of the Regional Air Traffic Division Chief.

This amendment is proposed under section 307(a) of the Federal Aviation Act of 1958 (72 Stat. 749; 49 U.S.C. 1348).

Issued in Washington, D.C., on April 25, 1963.

CLIFFORD P. BURTON,
Chief, Airspace Utilization Division.

[F.R. Doc. 63-4641; Filed, May 1, 1963; 8:45 a.m.]

FEDERAL POWER COMMISSION

[18 CFR Parts 2, 156, 157, 250]

[Docket No. R-240]

APPLICATIONS BY PIPELINE COMPANIES

Notice of Proposed Rule Making

APRIL 25, 1963.

1. Notice is given pursuant to section 4 of the Administrative Procedure Act that it is proposed to issue a statement of policy and amend our Regulations Under the Natural Gas Act, relating to the requirements to be followed by pipeline companies submitting for Commission consideration applications for certificates of public convenience and necessity under section 7(c) of the Natural Gas Act. We are also proposing to prescribe regulations covering applications to abandon under section 7(b) of the Act and to provide a simplified form for use by small distributors seeking gas service for a single community pursuant to section 7(a).

2. The proposed amendments are in furtherance of the Commission's continuing endeavors to find ways and means of expediting its proceedings without, at the same time, unduly imposing additional burdens upon applicants.

We are also issuing, concurrently with this notice, a notice proposing the prescription of a new annual report form requiring the submission of information designed to keep the Commission currently informed of the total gas supply situation of the companies subject to its jurisdiction (see notice issued this day in Docket No. R-239). Several of the amendments being proposed herein relate to the utilization of the information contained in such annual reports. See § 157.13(b) permitting incorporation by reference to annual reports and the several subdivisions of § 157.14(a)(10), Exhibit H, relating to total gas supply. Such incorporation should greatly simplify the filing requirements under this part. A proposed policy statement (§ 2.60) is intended to aid in expediting certificate proceedings.

The amendments require additional information with respect to other pending applications (§ 157.14(a)(5)), flow diagrams reflecting operations under peak conditions (§ 157.14(a)(8)), conversion to other fuels (§ 157.14(a)(12)), and, as noted above, new regulations relating to abandonment (§ 157.18). Section 157.7 has been amended to incorporate in paragraph (b) the provisions of Order No. 247 (18 CFR 2.59) specifying the conditions under which budget-type applications for authorization to construct and operate gas-purchase facilities may be filed. It is contemplated that if and when standards for other types of budget-type applications are approved they also will be incorporated into these regulations.

One particularly significant amendment is that to § 157.14(a) which will require the filing of all exhibits and testimony with applications. This provision will enable cases to proceed to hearing more quickly than at present. By imposing the requirement of filing testimony only to cases involving large facilities, we anticipate that no unreasonable burden will be placed on applicants who apply for minor additions which may be disposed of under the abridged hearing procedure.

3. Any interested person may submit to the Federal Power Commission, Washington 25, D.C., on or before May 31, 1963, data, views, and comments in writing concerning the amendments proposed herein. The Commission will consider these written submittals before taking any action upon the proposed amendments. An original and nine (9) copies of any such submittals should be filed.

4. These amendments to the Commission's regulations are proposed to be issued under the authority granted by the Natural Gas Act, as amended, particularly sections 7, 15, and 16 thereof (52 Stat. 824, 829, 830; 56 Stat. 83, 84; 15 U.S.C. 717f (a), (b), (c), (d), 717n, 717o).

5. In consideration of the foregoing, it is proposed to amend Parts 2, 156, 157, and 250 of Chapter I, Title 18 of the Code of Federal Regulations, in the following respects:

1. Paragraph (b) of § 156.3 is amended by changing the material which precedes subparagraph (1) to read as follows:

(b) *General contents of application.* Except as provided in paragraph (d) of this section, each application filed shall set forth the following information:

2. A new paragraph (d) is added to § 156.3 as follows:

(d) *Small distributors.* A distributor requesting natural gas service of less than 2000 Mcf per day to serve a single community may file the information required by the form of application represented in § 250.6 of this chapter.

3. The title of Part 157 is amended to read as follows:

PART 157—APPLICATIONS FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND ORDERS AUTHORIZING ABANDONMENT UNDER SECTION 7 OF THE NATURAL GAS ACT AS AMENDED

4. The center heading which immediately follows the table of contents of Part 157 are amended to read as follows:

Applications for Certificates of Convenience and Necessity and Orders Authorizing Abandonment Under Section 7 of the Natural Gas Act Concerning Any Operation, Sales, Service, Construction, Extension, Acquisition or Abandonment

5. Paragraph (a) of § 157.5 is amended to include references relating to apcations to abandon. As so amended the paragraph will read:

(a) Applications under section 7 of the Natural Gas Act shall set forth all information necessary to advise the Commission fully concerning the operation, sales, service, construction, extension, or acquisition for which a certificate or order authorizing abandonment is requested. Some applications may relate to facilities which are additions to existing facilities or facilities of such character that an abbreviated application may be justified under the provisions of § 157.7. Applications to abandon pursuant to section 7(b) of the Act shall conform to § 154.18 and to such other requirements of this part as may be pertinent. However, every applicant shall file all pertinent data and information necessary for a full and complete understanding of the proposed project as well as its effect upon applicant's present and future operations.

6. Subparagraph (5) of § 157.6(b) is amended by adding "any of applicant's customers" so that the subparagraph will read as follows:

(5) A full statement as to whether any other application to supplement or effectuate applicant's proposals must be or is to be filed by applicant, any of applicant's customers, or any other person, with any other Federal, State, or other regulatory body; and if so, the nature and status of each such application.

7. Section 157.7 is amended by designating it as paragraph (a), making minor technical changes therein, and adding a new paragraph (b) so that section, as amended, will read:

§ 157.7 Abbreviated applications.

(a) When the operations, sales, service, construction, extensions, or acquisitions proposed by an application do not require all the data and information specified by this part to disclose fully the nature and extent of the proposed undertaking, an abbreviated application may be filed provided it contains all information and supporting data necessary to explain fully the proposed project, its economic justification, its effect upon applicant's present and future operations and upon the public proposed to be served, and is otherwise in conformity with the applicable requirements of this part regarding form, manner of presentation, and filing. Such an application shall (1) state that it is an abbreviated application; (2) specify which of the data and information required by this part are omitted; and (3) relate the facts relied upon to justify separately each such omission.

(b) An abbreviated application requesting a budget-type certificate authorization covering the construction and operation of gas-purchase facilities may be filed when—

(1) The total estimated cost of the facilities to be installed in a given twelve-month period does not exceed 1½ percent of the applicant company's plant account or $5,000,000 whichever is the lesser.

(2) The total cost of any single project facilities to be installed during the authorization period does not exceed 25 percent of the total budget amount or $500,000, whichever is the lesser.

(3) The applicant agrees to file with the Commission, within sixty days after expiration of the authorization, a statement showing for each individual project:

(i) Description of facilities installed, i.e., miles and size of pipelines, compressor horsepower, metering facilities.

(ii) Location of facilities.

(iii) Actual installed cost of facilities subdivided by size of pipe, compressing, metering and appurtenant facilities.

(iv) Estimated recoverable gas reserves in Mcf at 14.73 psia made available to applicant by means of the facilities.

(v) Names of fields connected.

(vi) The names of the independent producers from whom the gas is being purchased together with the respective dates of the gas sales contracts and the docket number of the related seller.

(4) "Gas purchase facilities" means those facilities necessary to connect the applicant's system with the facilities of a seller authorized by this Commission to make a sale for resale in interstate commerce to the applicant.

8. Section 157.8 is amended to provide an opportunity to supply deficiencies in applications. As amended the section will read:

§ 157.8 Acceptance for filing or rejection of applications.

Applications will be docketed when received and the applicant so advised. If an application does not conform to the requirements of this part the Secretary will notify the applicant of all deficiencies. Deficient applications not amended within 20 days of the notice of deficiency will be rejected by the Secretary as provided by § 1.14 of this chapter. Copies of a rejected application will be returned. An application which relates to an operation, sale, service, construction, extension, acquisition, or abandonment, concerning which a prior application has been filed and rejected, shall be docketed as a new application. Such new application shall state the docket number of the prior rejected application.

9. Section 157.10 is amended by inserting a new second sentence and deleting the last sentence so that the section will read as follows:

§ 157.10 Protests and interventions.

Notices of applications, as provided by § 157.9, will fix the time within which any person desiring to participate in the proceeding or to file a protest regarding the application may file a petition to intervene or protest, and within which any interested regulatory agency, as provided by § 1.8 of this chapter, desiring to intervene may file its notice of intervention. Any person filing a petition to intervene shall state specifically whether he supports or opposes the issuance of a certificate giving his reasons and indicating whether he seeks formal hearing on the application. Failure to make timely filing will constitute ground for denial of participation in the absence of extraordinary circumstances for good cause shown. See §§ 1.7, 1.8, 1.10, and 1.37(f) of this chapter. A copy of each application, supplement and amendment thereto, including exhibits and testimony required by §§ 157.14, 157.16, and 157.18 which are specifically requested, shall upon request be promptly supplied by the applicant to anyone who has filed a petition for leave to intervene or given notice of intervention.

10. Paragraph (b) in § 157.13 is amended to permit references to annual reports as well as previous applications. So amended the paragraph will read:

(b) *Reference to annual reports and previous applications.* An application may refer to annual reports and previous applications filed with the Commission and shall specify the exact pages or exhibit numbers of the filing to which reference is made, including the page numbers in any exhibit to which reference is made. When reference is made to a previous application the docket number shall be stated. No part of a rejected application may be incorporated by reference.

11. The introductory paragraph of paragraph (a) of § 157.14 is amended to read as follows:

(a) *Exhibits and testimony to be attached to each application.* Each application tendered for filing shall be accompanied by all the exhibits upon which the applicant's case-in-chief will be based. If the facilities proposed result in an initial sales capacity or additional sales capacity of more than 25,000 Mcf per day or more than 5 percent of applicant's presently installed sales capacity, the testimony of all witnesses to be presented by the applicant shall also be attached to the application. The Secretary may require testimony to be submitted with respect to any application where not otherwise specifically required by this paragraph. The applicant shall identify the witnesses sponsoring testimony. The applicant may amend exhibits and testimony at any time prior to fifteen days before the commencement of formal hearings, but only upon a showing of good cause and permission granted by the presiding officer or the Commission. The exhibits filed by the applicant shall include, but not be limited to, the following:

12. Add a new subparagraph (5) to § 1.14(a) to read as follows:

(5) *Exhibit E—Other pending applications and filings.* A list of other applications and filings under sections 1, 3, 4, and 7 of the Natural Gas Act filed by the applicant which are pending before the Commission at the time of the filing of an application, including an explanation of the effect the grant or denial of those other applications and filings will have on the application and of the effect the grant or denial of the application will have on those other applications and filings.

13. Add a new sentence to the text of § 1.14(a)(6) preceding subdivision (i). As amended the text will read:

(6) *Exhibit F—Location of facilities.* A geographical map of suitable scale and detail showing, and appropriately differentiating between, all of the facilities proposed to be constructed or acquired and existing facilities of applicant, the operation or capacity of which will be directly affected by the proposed facilities. This map, or an additional map, shall clearly show the relationship of the new facilities to the applicant's overall system and shall include:

14. Subparagraph (7) of § 157.14(a) is amended to require an additional flow diagram reflecting both proposed and existing facilities. So amended the subparagraph will read:

(7) *Exhibit G—Flow diagrams showing daily design capacity and reflecting operation with and without proposed facilities added.* A flow diagram showing daily design capacity and reflecting operating conditions with only existing facilities in operation. A second flow diagram showing daily design capacity and reflecting operating conditions with both proposed and existing facilities in operation. Both flow diagrams shall include the following:

(i) Diameter, wall thickness, and length of pipe installed and proposed to be installed.

(ii) For each proposed new compressor station and existing station, the size, type and number of compressor units, horsepower required, horsepower installed and proposed to be installed, volume of gas to be used as fuel, suction and discharge pressures, and compression ratio.

(iii) Pressures and volumes of gas at the main-line inlet and outlet connections at each compressor station.

(iv) Pressures and volumes of gas at each intake and takeoff point and at the beginning and terminus of all existing and proposed facilities.

15. Subparagraph (8) *Exhibit G–I* of § 157.14(a) is amended to more fully describe system capabilities. As so amended the subparagraph will read:

(8) *Exhibit G–I—Flow diagrams reflecting maximum capabilities.* If Exhibit G does not reflect the maximum deliveries of which applicant's existing and proposed facilities would be capable of achieving under most favorable operating conditions with utilization of all facilities include an additional diagram or diagrams to depict such maximum capabilities. If utilization of all installed horsepower or other facilities is restricted, state the reason for the restriction.

16. A new subdivision (v) is added to § 157.14(a)(9) *Exhibit G–II* to read as follows:

(v) If the design day capacity shown in Exhibit G is predicated upon an ability to meet each customer's maximum contract quantity on the same day, indicate the number of days on which this has actually occurred during the past twenty years. If the design day capacity shown in Exhibit G is predicated upon an assumed diversity factor, state that factor and explain its derivation.

17. Subparagraph (10) *Exhibit H*, of § 157.14(a) is amended by deleting existing subdivisions (vi) through (viii), adding a new subdivision (vi), changing designation of subdivision (ix) to (vii) and revising subdivisions (i) through (v) all for the purpose of requiring the incorporation therein of certain data and information contained in a new Annual Report of Gas Supply which the Commission is proposing to promulgate concurrently with the promulgation of the amendments proposed herein. (See notice of proposed rulemaking in Docket No. R–239, issued April 25, 1963.) As so amended § 157.14(a)(10) will read as follows:

(10) *Exhibit H—Total gas supply data.* A statement of the total gas supply committed to, controlled by, or possessed by applicant which is available to it for the acts and the services proposed, together with:

(i) The estimated remaining recoverable saleable gas reserves available to applicant containing the data and information as required by Part III, Schedule I of the Annual Report of Gas Supply. (See § 260.7 of this chapter.)

(ii) Deliverability studies showing the volumes of natural gas which can and are proposed to be obtained each year as required by Part III of the Annual Report of Gas Supply and containing the data and information relating to (a) daily and annual volumes of saleable gas for the total system, Schedule II, and (b) the annual volumes of saleable gas from each source of supply, Schedule III.

(iii) The data and information as required by Parts IV, V, and VI of the Annual Report of Gas Supply.

(iv) The maps as required by Part II of the Annual Report of Gas Supply.

(v) A conformed copy of each gas purchase contract upon which applicant proposes to rely. Only three of the total number of copies of Exhibit H filed need include a copy of such contract. Contracts already on file with the Commission may be incorporated by reference without supplying additional copies, provided such contracts are identified with particularity by stating the exact pages of the contracts to be incorporated by reference and the file or docket number designation to which reference is made. The Commission or the presiding officer may direct that additional copies of such contracts be furnished to the Commission or to other parties to the proceeding. Any contract executed on and after April 2, 1962, and filed in support of an applicant's gas supply showing will be given no consideration in determining adequacy of gas supply if it contains any price-changing provisions other than those defined as permissible in § 154.93 of this chapter.

(vi) Pipeline companies which have filed annual reports in conformity with § 260.7 of this chapter applying for a certificate to increase an existing system by not more than 25,000 Mcf per day additional sales capacity and by not more than 5 percent of applicant's presently installed sales capacity will not be required to substantiate gas reserves and gas deliverability in their showing unless requested by the Commission.

(vii) A study of each proposed gas storage field showing: Location; geology; original and present reserves for each reservoir; original and present pressure of each reservoir; proposed top and base storage pressures; proposed top and base gas volumes to be stored; a deliverability study, including daily and annual injection and withdrawal rates and pressures; and maximum daily deliverability and maximum storage capacity under the proposed plan of development.

18. A new subdivision (xi) is added to subparagraph (11) of § 157.14(a) and the introductory sentence and subdivisions (i), (iv) and (v) thereunder are amended to read as follows:

(11) *Exhibit I—Market data.* A system-wide estimate of the volumes of gas to be delivered during each of the first 3 full years of operation of the proposed facilities and during the years when the proposed facilities are under construction, and actual data of like import for each of the 3 years next preceding the filing of the application, together with:

(i) Names and locations of customer companies and municipalities, showing the number of residential, commercial, firm industrial, interruptible industrial, residential space-heating, commercial space-heating, and other types of customers for each distribution system to be served at retail or wholesale; and the names and locations of each firm and interruptible direct industrial customer whose estimated consumption totals 10,000 Mcf or more in any calendar month or 100,000 Mcf or more per year together with an explanation of the end use to which each of these direct industrial customers will put the gas.

* * * * *

(iv) Explanation and derivation of basic factors used in estimating future requirements, including, for example: Peak-day and annual degree-day deficiencies, annual load factors of applicant's system and of its deliveries to its proposed customers; individual consumer peak-day and annual consumption factors for each class of consumers, with supporting historical data; forecasted saturation of space-heating as related to past experience; and full detail as to all other sources of gas supply available to applicant and to each of its customers, including manufacturing facilities and liquid petroleum gas.

(v) Conformed copy of each contract, letter of intent or other agreement for sale or transportation of natural gas by means of the proposed facilities. Indicate the rate to be charged. If no agreements have been made, indicate the basis for assuming that contracts will be consummated and that service will be rendered under the terms contemplated in the application.

* * * * *

(xi) If applicant has previously applied, but has not received authorization, to serve any portion of the market contemplated by the proposed project, explain the previous proposal and give docket numbers of the applications previously filed with this Commission.

19. Delete subparagraph (12) of § 157.14(a) and insert in lieu thereof the following:

(12) *Exhibit J—Conversion to natural gas.* If it is assumed that proposed customers will convert from other fuels to natural gas, state the basis for such assumption and include a study showing estimated cost of converting customers' facilities to natural gas. The study should indicate the number of customers of each of the other fuels who applicant anticipates will convert to natural gas and the current cost of fuel to be displaced compared to the cost of natural gas on an equivalent Btu basis.

20. Add two new sentences to subparagraph (13) of § 157.14(a). As so amended the subparagraph will read:

(13) *Exhibit K—Cost of facilities.* A detailed estimate of total capital cost of the proposed facilities for which application is made, showing cost of construction by operating units such as compressor stations, main pipelines, laterals, measuring and regulating stations, and separately stating the cost of right-of-way, damages, surveys, materials, labor, engineering and inspection, administrative overhead, fees for legal and other services, interest during construction, and contingencies. Include a brief statement indicating the source of information used as the basis for the above estimate. If not otherwise set forth, submit data on preliminary bids for the proposed facilities and recent experienced cost data for facilities of similar character.

21. Amend subdivision (ii) of § 157.14 (a)(14) *Exhibit L—Financing* by adding "together with letters of intent." As so amended the subdivision will read:

(ii) The manner in which applicant proposes to dispose of securities by private sale, competitive bidding or otherwise; the persons, if known, to whom they will be sold or issued together with letters of intent, and if not known, the class or classes of such persons.

22. The introductory paragraph of subparagraph (16) of § 157.14(a) is amended to read as follows:

(16) *Exhibit N—Revenues—Expenses—Income.* When the estimated revenues and expenses related to a proposed facility will significantly affect the operating revenues or operating expenses of an applicant, there shall be submitted a system-wide statement for the last year preceding the proposed construction or service and pro forma system-wide and incremental statements for each of the first three full years of operation of the proposed facilities, showing:

23. Add a new paragraph (d) at the end of § 157.14 to read as follows:

(d) *Availability of Commission staff for advice prior to formal filing.* Prior to filing an application, any person may informally confer with the staff of the Commission to obtain advice on any problem of statement or presentation of an application or any part thereof.

24. Section 157.16 is amended by amending the text preceding paragraph (a) to read as follows:

§ 157.16 Exhibits relating to acquisitions.

In addition to the exhibits required by § 157.14 of this chapter, every application involving acquisition of facilities shall be accompanied by the exhibits listed below. If the acquisition is of facilities with a sales capacity of more than 25,000 Mcf per day or more than 5 percent of applicant's present sales capacity, the testimony of all witnesses to be presented by the applicant shall also be attached to the application. The Secretary may require testimony to be filed in any docket where not otherwise specifically required by this paragraph.

25. Part 157 is amended by inserting to follow § 157.17 the following new § 157.18:

§ 157.18 Applications to abandon facilities or service; exhibits.

Applications for an order authorizing abandonment of facilities or service pursuant to section 7(b) of the Natural Gas Act shall contain a statement setting forth in detail the reasons for the abandonment and shall contain the exhibits listed below. The Secretary may, in addition, require that the testimony of all witnesses to be presented by the applicant be filed together with all exhibits upon which applicant will base its case-in-chief.

(a) *Exhibit T—Related applications.* A statement showing:

(1) The docket numbers of the prior proceedings in which the facilities or services sought to be abandoned were certificated.

(2) The docket numbers of related applications pending before or which have been authorized by the Commission with an explanation of the interrelationship of those applications with the instant application.

(b) *Exhibit U—Contracts and other agreements.* A conformed copy of each contract or other agreement pertaining directly or indirectly to the abandonment of facilities or service, including all agreements which influenced applicant to seek the abandonment and all agreements which are dependent upon the approval of the proposed abandonment.

(c) *Exhibit V—Flow diagram showing daily design capacity and reflecting operation of applicant's system after abandonment.* A flow diagram showing daily design capacity and reflecting operating conditions of applicant's system after abandonment of facilities, including the following:

(1) Diameter, wall thickness, and length of pipe remaining.

(2) For each remaining compressor station, the size, type and number of compressor units, horsepower required, horsepower installed, volume of gas to be used as fuel, suction and discharge pressures, and compression ratio.

(3) Pressures and volumes of gas at the main-line inlet and outlet connections at each compressor station.

(4) Pressures and volumes of gas at each intake and takeoff point and at the beginning and terminus of all remaining facilities.

(d) *Exhibit W—Impact on customers whose service will be terminated.* A statement indicating the availability of natural gas from other sources to applicant's customers whose service will be terminated by the abandonment and a statement showing the economic effect of the abandonment on applicant's customers. If no other natural gas is available, indicate the availability of other fuels to those customers and explain why the abandonment of service to each customer is permitted by the public convenience and necessity.

(e) *Exhibit X—Effect of the abandonment on existing tariffs.* A statement showing the effect of the proposed abandonment upon any rate schedules or tariffs on file with this Commission, together with pro forma rate schedule sheets, notices of cancellation, or other tariff filings required to be made with this Commission.

(f) *Exhibit Y—Accounting treatment of abandonment.* Concisely describe the changes of property, indicating the cost of property to be abandoned in place, the cost of property to be removed and salvaged, the proposed disposition of salvaged materials, and a description of equipment to be relocated setting forth its cost, its proposed new location, and the extent of rehabilitation required. Include the information required below.

(1) State the proposed accounting treatment for property changes, showing, for example, retirements by primary plant accounts, cost of removal, salvage realized for materials and equipment sold, original cost of reusable materials and equipment recovered (see Account 154 of the Uniform System of Accounts), and maintenance costs for reconditioning of reusable materials and equipment.

(2) If the abandonment will be by sale of property, describe the property to be sold, together with the proposed accounting treatment as required by paragraph F of Gas Plant Instruction 5 of the Uniform System of Accounts. Applicant may use pro forma accounting entries based on estimated amounts, provided that upon consummation of the sale he must file proposed accounting entries in conformity with the requirements of the Uniform System of Accounts. If the proposed sale will result in a taxable gain to the applicant, indicate the amount of federal and state income taxes to be allocated to the gain. If no allocation is to be made, explain the reasons.

(3) State the amount of accumulated deferred income taxes attributable to the property to be abandoned. Indicate the proposed accounting treatment of those accumulated deferred taxes.

26. Delete from paragraph (c) of § 157.20 the words "and placed in service and authorized operations have commenced," which appear in subparagraph (4). As so amended subparagraph (4) will read as follows:

(4) Within six months after authorized facilities have been constructed, a statement showing, on the basis of all costs incurred to that date and estimated to be incurred for final completion of the project, the cost of constructing authorized facilities, such total cost to be classified according to the estimates submitted in the certificate proceeding and compared therewith and any significant differences explained.

27. Part 2 is amended by inserting to follow § 2.59 the following new § 2.60:

§ 2.60 Pipeline certificate proceedings—procedure.

In order to more fully implement and utilize the procedures contemplated by Order No. 217 (22 FPC 872, 24 F.R. 946), designed to expedite hearings and shorten records, the procedure hereafter in pipeline certificate proceedings which the Commission regards as suited to such techniques will be as follows:

(a) The Commission will give prompt public notice of the application and fix a date for the filing of any petitions for or notices of intervention (see §§ 1.8(d) and 157.10 of this chapter, i.e., Rules of Practice and Procedure Under the Natural Gas Act, respectively).

(b) Any notice of application issued by the Commission will designate the presiding examiner, who thereafter will control the proceeding until the completed record is certified to the Commission.

(c) Any Commission order granting intervention will direct the natural gas company filing an application to serve copies of its filings upon all interveners promptly thereafter unless such service has already been made pursuant to Part 157 of this chapter.

(d) The hearing, when commenced, shall be continuous except where the examiner finds that extraordinary circumstances preclude such procedure and shall include full and complete cross-examination of all witnesses on the issues to be tried.

28. Part 250 is amended by inserting to follow § 250.5 the following new § 250.6:

§ 250.6 Form of application to be filed by distributor under section 7(a), seeking gas service of not more than 2000 Mcf per day (3d year of operation) for a single community.

(See § 156.3(d) of this chapter.)

1. Name of applicant (indicate whether individual, corporation or municipality).

2. Address.

3. Name, title, mailing address and telephone number of person to be contacted concerning the application.

4. Name of natural gas company from whom service is desired.

5. Are you now rendering gas service? If so, briefly describe operations.

6. Nature of service sought, giving a brief description of proposal, including location of community, population, number of residences and kind of service sought and to be rendered, showing:

(a) Is this an initial connection with the pipe line, or is it an extension or improvement of existing facilities?

(b) Estimate of maximum day requirements for residential, commercial and industrial customers for each of the first three years of proposed operations (Mcf at 14.73 psia), and how the estimates were derived;

(c) Estimate of annual requirements for residential, commercial and industrial customers for each of the first three years of proposed operations (Mcf at 14.73 psia), and how the estimates were derived.

7. Do you have or do you need a franchise to render the proposed service? If you have filed an application for such a franchise, with whom was it filed and what action has been taken on it?

8. Do you have or do you need a state certificate approving the proposed distribution system project? If you have filed an application for such a certificate, with whom was it filed and what action has been taken on it?

9. When do you propose to start construction and when do you estimate it will be completed? When do you propose to start selling gas?

10. How much are the facilities expected to cost? Show separately, the estimated cost of the distribution system, the connecting supply lines, legal fees, financing fees and engineering fees, and briefly state how the estimates were derived.

11. Have you used the services of an engineering consultant? If so, the consultant should state his experience in the design of distribution systems, cost data of systems now in service compared with his initial estimates, and the actual rate at which new customers were attached in the new distribution systems.

12. How do you propose to finance the proposed facilities? Submit evidence that the money will be available. (This evidence need not be submitted if you have a state certificate for your project.)

13. For each of the first three years of operation of the proposed facilities, show (a) the estimated gross annual revenues for the natural gas estimated to be sold to residential, commercial and industrial customers as shown in Item 6(c) and the rates you propose to charge, and (b) the cost of gas purchased by you (state the rate to be paid to the pipeline supplier and the pipeline's rate schedule under which you will purchase said gas), other operating and maintenance expenses and operating revenue deductions, and (c) the net operating revenues.

14. Municipalities should submit a bond amortization and interest schedule for the life of the bond issue related to the project and computation of the average debt service coverage ratio over the life of the issue. State briefly how all estimates were derived.

Exhibits to be furnished:

Exhibit A. A geographical map showing clearly all of the transmission facilities proposed to be installed and operated by you between your distribution system and the transmission pipeline system of the proposed supplier, including:

(a) Location, length and size of your transmission lines;

(b) Location and size (related horsepower) of your transmission compressor stations (if any);

(c) Location and designation of each point of connection of your proposed transmission facilities with proposed pipeline supplier;

(d) And if known, location, length and size of facilities to be installed by the proposed supplier.

Exhibit B. A flow diagram showing the maximum daily capacity of the proposed connecting pipeline to carry gas from the supplier to the community to be served. The diagram should show expected operating pressures on the connecting pipeline at the point of connection with the supplier and at the other terminal of the connecting pipeline: flow of gas through the connecting pipeline in Mcf per day; length of the connecting pipeline and its inside and outside diameter.

By direction of the Commission.

[SEAL] GORDON M. GRANT,
Acting Secretary.

[F.R. Doc. 63-4644; Filed, May 1, 1963; 8:46 a.m.]

[18 CFR Part 260]

[Docket No. R-239]

TOTAL GAS SUPPLY OF PIPELINE COMPANIES; ANNUAL REPORT FORM

Notice of Proposed Rule Making

APRIL 25, 1963.

1. Notice is given pursuant to section 4 of the Administrative Procedure Act that it is proposed to prescribe a new form for the annual reporting by natural gas pipeline companies of information relating to their total gas supply. A copy of the proposed FPC Form No. 15 including instructions and schedules is attached hereto.[1]

2. The proposed annual report will require the submission of supply and deliverability information by each Class A natural gas pipeline company, as defined in the Uniform System of Accounts, on report forms and on appropriate electric accounting machine (EAM) punch cards, electric data processing (EDP) magnetic tape or paper tape, but will permit the submission by Class B, C and D natural gas pipeline companies of the required information in printed form.

3. In the past it has been Commission practice to review the status of pipeline company gas reserves and deliverability only at such times as the company seeks a certificate of public convenience and necessity. The Commission, however, believes that the proper administration of the Natural Gas Act requires that it make a continuing review of the gas reserves and deliverability of the pipeline companies subject to its jurisdiction. The annual report herein proposed will furnish the Commission with the necessary information to carry out that responsibility. In addition, while the question of reserves remains in issue in each certificate proceeding, the filing of annual reports will expedite pipeline certificate cases by permitting their incorporation by reference to satisfy the burden of proving the adequacy of reserves and deliverability, except in cases involving applications for new pipelines or where existing pipeline companies seek to serve major markets over new routes from new supply areas, requiring extensive expansion of facilities, or in unusual circumstances.

4. The Commission contemplates making an annual review of the gas reserves and deliverability of each pipeline company and when appropriate to hold hearings on the adequacy of the companies' reserves pursuant to section 14(b) of the Act. The test for determining the adequacy of reserves will be a flexible one and the determination will be based on all of the relevant facts concerning the particular company, including the information furnished in the annual report herein proposed. The overriding objective will be to assure continuity of service to gas consumers at the lowest possible price. The twelve year deliverability life heretofore found to be a primary requisite by the Commission will not necessarily be controlling with respect to established pipelines with an active gas procurement organization whose lines extend into production areas in which exploration is continuing. The deliverability life showing of a new pipeline company seeking to initiate service or an existing pipeline company seeking to serve major new markets or to serve existing markets from new sources of supply over new routes involving extensive expansion of existing facilities will be dependent upon the future availability of gas in its proposed new supply areas, but in no event shall the minimum deliverability life of the incremental supply needed to serve the new or expanded market be less than twelve years.

5. If the proposed rules are adopted the Commission would expect simultaneously to issue a statement of policy providing that:

(a) When a pipeline company has demonstrated through the Annual Reports filed pursuant to § 260.7 of this chapter that it has an active gas procurement organization and its pipeline system extends into production areas in which exploration is continuing, the twelve-year deliverability life heretofore found to be a primary requisite by the Commission will not necessarily be applied and the Commission's deliverability requirement will be flexible.[2]

(b) Existing pipeline companies will not be required to file information with regard to gas supply and deliverability in support of pipeline system expansions, other than with respect to applications to serve major new markets or to serve existing markets from new sources of gas supply by new routes involving extensive expansion of existing facilities, but may rely on the information set forth in filed annual reports, by reference thereto, unless otherwise ordered by the Commission.

(c) The deliverability life showing of a new pipeline company seeking to initiate service or an existing pipeline company seeking to serve major new markets or to serve existing markets from new sources of supply over new routes involving extensive expansion of existing facilities will be dependent upon the future availability of gas in its proposed new supply areas, but in no event shall the minimum deliverability life of the incremental supply needed to serve the new or expanded market be less than twelve years.

6. Any person may submit to the Federal Power Commission, Washington 25, D.C., no later than May 31, 1963, data, views, comments and suggestions in writing concerning the proposed annual report form. An original and nine conformed copies of any such submittals should be filed. The Commission will consider any such written submittals before acting on the proposed amendment and annual report form.

7. The amendment to the Commission's regulations prescribing the report form is proposed to be issued under the authority granted the Commission by sections 7, 10(a) and 16 of the Natural Gas Act, as amended (52 Stat. 824, 826, 830; 56 Stat. 83; 15 U.S.C. 717f, 717i, 717o).

8. In consideration of the foregoing it is proposed to amend Part 260, Statements and Reports, of Chapter I, Title 18 of the Code of Federal Regulations by adding a new § 260.7 to read as follows:

§ 260.7 Form No. 15—Annual report of gas supply and deliverability for natural gas companies.[3]

(a) The form of annual report of total gas supply and deliverability for natural gas companies, designated herein as FPC Form No. __ is prescribed for the year beginning July 1, 1962 and ending June 30, 1963, and thereafter.

(b) Each natural gas company, as defined by the Natural Gas Act, as amended (52 Stat. 821), shall prepare and file with the Commission for the year beginning July 1, 1962, and ending June 30, 1963, and each year thereafter, on or before September 1, 1963, and each September 1, thereafter, an original and such number of conformed copies of the above-designated FPC Form No. 15 as indicated in the General Instructions set out in that Form. The information described by the Instructions which is to be filed on electric accounting (EAM) punch cards, electric data processing (EDP) magnetic tape or paper tape shall be filed in such form as may be agreed upon between the company and the Commission staff prior to the date upon which the first annual report must be filed. One copy of said report should be retained by the company in its files. The conformed copies may be carbon copies if legible.

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[1] Filed as part of the original document.

[2] "Deliverability" as used herein represents the number of future years during which a pipeline company can meet its annual requirements for its presently certificated delivery capacity from presently committed sources of supply. The availability of gas from these sources of supply shall be governed by the physical capabilities of these sources to deliver gas, by the terms of existing gas purchase contracts and limitation imposed by state or federal regulatory agencies.

[3] As used herein, "natural gas company" does not include "independent producers," as defined in § 154.91(a) of this chapter.

(c) This annual report consists of six parts, including three schedules, and is designed to furnish the Commission with information concerning the gas supply organization of the company, the company's total gas supply, the company's gas procurement program, each reservoir from which the company obtains gas, contracts under which the company purchases gas and deliverability data.

By direction of the Commission.

[SEAL] GORDON M. GRANT,
Acting Secretary.

[F.R. Doc. 63-4643; Filed, May 1, 1963; 8:45 a.m.]

Notices

DEPARTMENT OF THE TREASURY

Office of the Secretary

[Dept. Circular Public Debt Series—No. 8–63]

3¼ PERCENT TREASURY CERTIFICATES OF INDEBTEDNESS OF SERIES B–1964 DUE MAY 15, 1964

Offering of Certificates

APRIL 25, 1963.

I. *Offering of certificates.* 1. The Secretary of the Treasury, pursuant to the authority of the Second Liberty Bond Act, as amended, invites subscriptions, at par, from the people of the United States for certificates of indebtedness of the United States, designated 3¼ percent Treasury Certificates of Indebtedness of Series B–1964, in exchange for the following securities, all of which mature May 15, 1963:

3¼ percent Treasury Certificates of Indebtedness of Series B–1963;
4 percent Treasury Notes of Series B–1963; or
3¼ percent Treasury Notes of Series D–1963.

The amount of the offering under this circular will be limited to the amount of eligible securities tendered in exchange and accepted. The books will be open only on April 29 through May 1, 1963, for the receipt of subscriptions for this issue.

2. In addition to the offering under this circular, holders of the eligible securities are offered the privilege of exchanging all or any part of such securities for 3⅝ percent Treasury Notes of Series B-1966 (additional issue), which offering is set forth in Department Circular, Public Debt Series—No. 9–63, issued simultaneously with this circular.

II. *Description of certificates.* 1. The certificates will be dated May 15, 1963, and will bear interest from that date at the rate of 3¼ percent per annum, payable semiannually on November 15, 1963, and May 15, 1964. They will mature May 15, 1964, and will not be subject to call for redemption prior to maturity.

2. The income derived from the certificates is subject to all taxes imposed under the Internal Revenue Code of 1954. The certificates are subject to estate, inheritance, gift or other excise taxes, whether Federal or State, but are exempt from all taxation now or hereafter imposed on the principal or interest thereof by any State, or any of the possessions of the United States, or by any local taxing authority.

3. The certificates will be acceptable to secure deposits of public moneys. They will not be acceptable in payment of taxes.

4. Bearer certificates with interest coupons attached will be issued in denominations of $1,000, $5,000, $10,000, $100,000, $1,000,000, $100,000,000 and $500,000,000. The certificates will not be issued in registered form.

5. The certificates will be subject to the general regulations of the Treasury Department, now or hereafter prescribed, governing United States certificates.

III. *Subscription and allotment.* 1. Subscriptions will be received at the Federal Reserve Banks and Branches and at the Office of the Treasurer of the United States, Washington 25, D.C. Banking institutions generally may submit subscriptions for account of customers, but only the Federal Reserve Banks and the Treasury Department are authorized to act as official agencies.

2. The Secretary of the Treasury reserves the right to reject or reduce any subscription, and to allot less than the amount of certificates applied for; and any action he may take in these respects shall be final. Subject to these reservations, all subscriptions will be allotted in full. Allotment notices will be sent out promptly upon allotment.

IV. *Payment.* 1. Payment for the face amount of certificates allotted hereunder must be made on or before May 15, 1963, or on later allotment, and may be made only in securities of the three issues enumerated in paragraph 1 of Section I hereof, which will be accepted at par, and should accompany the subscription. Coupons dated May 15, 1963, should be detached from the certificates and notes in bearer form and cashed when due. In the case of registered notes of Series D–1963, the final interest due on May 15, 1963, will be paid by check drawn in accordance with the assignments on the notes surrendered, or by credit in any account maintained by a banking institution with the Federal Reserve Bank of its District.

V. *Assignment of registered notes.* 1. Treasury Notes of Series D–1963 in registered form tendered in payment for certificates offered hereunder should be assigned by the registered payees or assignees thereof to "The Secretary of the Treasury for exchange for 3¼ percent Treasury Certificates of Indebtedness of Series B–1964 to be delivered to ----------", in accordance with the general regulations of the Treasury Department governing assignments for transfer or exchange, and thereafter should be surrendered with the subscription to a Federal Reserve Bank or Branch or to the Office of the Treasurer of the United States, Washington 25, D.C. The notes must be delivered at the expense and risk of the holder.

VI. *General provisions.* 1. As fiscal agents of the United States, Federal Reserve Banks are authorized and requested to receive subscriptions, to make allotments on the basis and up to the amounts indicated by the Secretary of the Treasury to the Federal Reserve Banks of the respective Districts, to issue allotment notices, to receive payment for certificates alloted, to make delivery of certificates on full-paid subscriptions allotted, and they may issue interim receipts pending delivery of the definitive certificates.

2. The Secretary of the Treasury may at any time, or from time to time, prescribe supplemental or amendatory rules and regulations governing the offering, which will be communicated promptly to the Federal Reserve Banks.

[SEAL] DOUGLAS DILLON,
Secretary of the Treasury.

[F.R. Doc. 63–4665; Filed, May 1, 1963; 8:49 a.m.]

[Dept. Circular Public Debt Series—No. 9–63]

3⅝ PERCENT TREASURY NOTES OF SERIES B–1966 DUE FEBRUARY 15, 1966

Offering of Notes; Additional Issue

APRIL 25, 1963.

I. *Offering of notes.* 1. The Secretary of the Treasury, pursuant to the authority of the Second Liberty Bond Act, as amended, invites subscriptions, at par and accrued interest, from the people of the United States for notes of the United States, designated 3⅝ percent Treasury Notes of Series B–1966, in exchange for the following securities, all of which mature May 15, 1963:

3¼ percent Treasury Certificates of Indebtedness of Series B–1963;
4 percent Treasury Notes of Series B–1963; or
3¼ percent Treasury Notes of Series D–1963.

The amount of the offering under this circular will be limited to the amount of eligible securities tendered in exchange and accepted. The books will be open only on April 29 through May 1, 1963, for the receipt of subscriptions for this issue.

2. In addition to the offering under this circular, holders of the eligible securities are offered the privilege of exchanging all or any part of such securities for 3¼ percent Treasury Certificates of Indebtedness of Series B–1964 which offering is set forth in Department Circular, Public Debt Series—No. 8–63, issued simultaneously with this circular.

II. *Description of notes.* 1. The notes now offered will be an addition to and will form a part of the 3⅝ percent Treasury Notes of Series B–1966 issued pursuant to Department Circular, Public Debt Series—No. 10–62, dated April 30, 1962, will be freely interchangeable therewith, and are identical in all respects therewith except that interest on the notes to be issued under this circular will accrue from May 15, 1963. Subject to the provision for the accrual of interest from May 15, 1963, on the notes now offered, the notes are described in the following quotation from Department Circular, Public Debt Series—No. 10–62:

1. The notes will be dated May 15, 1962, and will bear interest from that date at the rate of 3⅝ percent per annum, payable on a semiannual basis on August 15, 1962, and thereafter on February 15 and August 15 in each year until the principal amount becomes payable. They will mature February 15, 1966, and will not be subject to call for redemption prior to maturity.

2. The income derived from the notes is subject to all taxes imposed under the Internal Revenue Code of 1954. The notes are subject to estate, inheritance, gift or other excise taxes, whether Federal or State, but are exempt from all taxation now or hereafter imposed on the principal or interest thereof by any State, or any of the possessions of the United States, or by any local taxing authority.

3. The notes will be acceptable to secure deposits of public moneys. They will not be acceptable in payment of taxes.

4. Bearer notes with interest coupons attached, and notes registered as to principal and interest, will be issued in denominations of $1,000, $5,000, $10,000, $100,000, $1,000,000, $100,000,000 and $500,000,000. Provision will be made for the interchange of notes of different denominations and of coupon and registered notes, and for the transfer of registered notes, under rules and regulations prescribed by the Secretary of the Treasury.

5. The notes will be subject to the general regulations of the Treasury Department, now or hereafter prescribed, governing United States notes.

III. *Subscription and allotment.* 1. Subscriptions will be received at the Federal Reserve Banks and Branches and at the Office of the Treasurer of the United States, Washington 25, D.C. Banking institutions generally may submit subscriptions for account of customers, but only the Federal Reserve Banks and the Treasury Department are authorized to act as official agencies.

2. All subscribers requesting registered notes will be required to furnish appropriate identifying numbers as required on tax returns and other documents submitted to the Internal Revenue Service, i.e., an individual's social security number or an employer identification number.

3. The Secretary of the Treasury reserves the right to reject or reduce any subscription, and to allot less than the amount of notes applied for; and any action he may take in these respects shall be final. Subject to these reservations, all subscriptions will be allotted in full. Allotment notices will be sent out promptly upon allotment.

IV. *Payment.* 1. Payment for the face amount and accrued interest from February 15 to May 15, 1963 ($8.91229 per $1,000) for notes allotted hereunder must be made on or before May 15, 1963, or on later allotment. Payment for the notes allotted may be made only in securities of the three issues enumerated in paragraph 1 of Section I hereof, which will be accepted at par, and should accompany the subscription. Payment will not be deemed to have been completed where registered notes are requested if the appropriate identifying number, as required by paragraph 2 of Section III hereof, has not been furnished; provided, however, if a subscriber has applied for but is unable to furnish the identifying number by the payment date only because it has not been issued, he may elect to receive, pending the furnishing of the identifying number, interim receipts and in this case payment will be deemed to have been completed. Coupons dated May 15, 1963, should be detached from the certificates and notes in bearer form and cashed when due. In the case of registered notes of Series D-1963, the final interest due on May 15, 1963, will be paid by check drawn in accordance with the assignments on the notes surrendered, or by credit in any account maintained by a banking institution with the Federal Reserve Bank of its District.

V. *Assignment of registered notes.* 1. Treasury Notes of Series D-1963 in registered form tendered in payment for notes offered hereunder should be assigned by the registered payees or assignees thereof, in accordance with the general regulations of the Treasury Department governing assignments for transfer or exchange, in one of the forms hereafter set forth, and thereafter should be surrendered with the subscription to a Federal Reserve Bank or Branch or to the Office of the Treasurer of the United States, Washington 25, D.C. The maturing notes must be delivered at the expense and risk of the holder. If the new notes are desired registered in the same name as the notes surrendered, the assignment should be to "The Secretary of the Treasury for exchange for 3⅝ percent Treasury Notes of Series B-1966"; if the new notes are desired registered in another name, the assignment should be to "The Secretary of the Treasury for exchange for 3⅝ percent Treasury Notes of Series B-1966 in the name of ----------"; if new notes in coupon form are desired, the assignment should be to "The Secretary of the Treasury for exchange for 3⅝ percent Treasury Notes of Series B-1966 in coupon form to be delivered to ---------".

VI. *General provisions.* 1. As fiscal agents of the United States, Federal Reserve Banks are authorized and requested to receive subscriptions, to make allotments on the basis and up to the amounts indicated by the Secretary of the Treasury to the Federal Reserve Banks of the respective Districts, to issue allotment notices, to receive payment for notes allotted, to make delivery of notes on full-paid subscriptions allotted, and they may issue interim receipts pending delivery of the definitive notes.

2. The Secretary of the Treasury may at any time, or from time to time, prescribe supplemental or amendatory rules and regulations governing the offering, which will be communicated promptly to the Federal Reserve Banks.

[SEAL] DOUGLAS DILLON,
Secretary of the Treasury.

[F.R. Doc. 63-4666; Filed, May 1, 1963; 8:49 a.m.]

DEPARTMENT OF AGRICULTURE

Agricultural Stabilization and Conservation Service

ORGANIZATION, FUNCTIONS, AND DELEGATIONS OF AUTHORITY

I. *General.* The Agricultural Stabilization and Conservation Service (hereinafter sometimes referred to as ASCS) was established June 5, 1961, by the Secretary of Agriculture pursuant to the authority vested in him by Sec. 161, Revised Statutes (5 U.S.C. 22), and Reorganization Plan No. 2 of 1953. This Service is responsible for the planning, coordinating, and administering of agricultural stabilization and conservation policies and programs which include acreage allotment and marketing quota programs; programs of Commodity Credit Corporation to stabilize, support, and protect farm income and prices, to assist in the maintenance of balanced and adequate supplies of agricultural commodities, to sell in domestic outlets surplus commodities and to otherwise dispose of such commodities (except as authority is assigned to the Foreign Agricultural Service with respect to policies and programs for export sales and subsidies and barter and to the Agricultural Marketing Service for the distribution of food (19 F.R. 74, as amended by 26 F.R. 8403)), and to finance the commercial sale and exportation of surplus commodities; International Wheat Agreement; International Sugar Agreement; emergency feed assistance programs for the relief of agriculture from the effects of any major disaster; the agricultural conservation programs (except the Great Plains Program and the naval stores conservation program) under sections 7 to 17 of the Soil Conservation and Domestic Allotment Act, as amended; the special wheat and feed grain programs under section 16 of the Soil Conservation and Domestic Allotment Act, as amended, the Agricultural Act of 1961, and the Food and Agriculture Act of 1962; the conservation reserve program; and sugar programs and activities under the provisions of the Sugar Act of 1948, as amended. This Service also determines the surplus agricultural commodities in CCC inventory which are available for disposition, conducts procurement, processing, shipment, payment, and related service operations on surplus removal and supply operations directed by the Agricultural Marketing Service and by other agencies, performs commodity disposal, handling, shipment, payment and related services for the Foreign Agricultural Service with respect to export sale and subsidy and barter operations, and carries out defense production programs, plans and operations as assigned. The principal office of the Agricultural Stabilization and Conservation Service is at Washington, D.C., in the Administration Building of the U.S. Department of Agriculture. It consists of offices and divisions listed in the following paragraph.

II. *Organization, Agricultural Stabilization and Conservation Service.* A. The following is a listing of the ASCS by reporting lines.

1. Administrator:

Associate Administrator.

2. Directors, Policy Staffs.

3. Policy and Program Appraisal Division.

4. Deputy Administrator, State and County Operations:

Farmer Programs Division.
Disaster and Defense Services Staff.
Aerial Photography Division.

Conservation and Land Use Division.
Bin Storage Division.
Area Directors.
ASCS State Offices.
ASCS County Offices.

5. Deputy Administrator, Commodity Operations:

Inventory Management Division.
Procurement and Sales Division.
Evanston Commodity Office.
Kansas City Commodity Office.
Minneapolis Commodity Office.
New Orleans Commodity Office.
Cotton Products and Export Operations Office, N.Y.C.

6. Deputy Administrator, Management:

Administrative Services Division.
Budget Division.
Fiscal Division.
Information Division.[1]
Operations Analysis Staff.
Personnel Management Division.
Data Processing Center, Kansas City, Missouri.
Management Field Office, Kansas City, Missouri.

III. *Functional responsibilities.* The following are the responsibilities of the organizational units of the Agricultural Stabilization and Conservation Service, listed in accordance with reporting lines.

A. *Administrator.* The Administrator, who is also the Executive Vice President of the Commodity Credit Corporation, is responsible to the Assistant Secretary in charge of Agricultural Marketing and Stabilization for the general direction and supervision of programs assigned to the Agricultural Stabilization and Conservation Service.

Associate Administrator. The Associate Administrator acts for and assists the Administrator in formulating and administering the policies and programs of ASCS and CCC. The Associate Administrator is also Vice President of the CCC. In the absence or unavailability of the Administrator, the Associate Administrator exercises the powers and performs the duties of the Administrator of ASCS and the Executive Vice President of CCC.

B. *Policy Staffs.* There are seven Policy Staffs, namely:

Cotton Policy Staff.
Grain Policy Staff.
Livestock and Dairy Policy Staff.
Oils and Peanut Policy Staff.
Sugar Policy Staff.
Tobacco Policy Staff.
Conservation and Land Use Policy Staff.

For their specialized commodity and functional assignments, the Policy Staffs formulate, develop and recommend over-all broad program policy for price support, production adjustment, supply management, conservation and land use, disaster livestock feed, CCC-owned storage facilities, commercial storage, international commodity agreements and other related and assigned programs. They recommend the preparation of program dockets; study and analyze program operations and recommend necessary adjustments and improvements. The Director of each Policy Staff reports to the Administrator for the specific commodity or functional responsibilities assigned.

C. *Policy and Program Appraisal Division.* The Policy and Program Appraisal Division, reporting to the Administrator, develops guides and standards for use in evaluating and appraising policy and program operations. It analyzes, evaluates and appraises policy and program operations as to effectiveness and conformance with dockets, regulations, directives and legislation. It formalizes broad recommendations leading to policy and program improvements and adjustments; reviews, analyzes and reports on proposed, pending and enacted legislation; makes special economic and statistical analyses and studies pertaining to policy and program activities including projections for budgetary purposes; develops and coordinates the development of legislative proposals; prepares program dockets as recommended by policy staffs; and carries out assigned defense activities including appraisal of program policy relating to requirements and distribution of nonfood production requisites; analysis of on-farm production resources and capabilities, determination of scope of national and State defense production goals and programs for crops and livestock, salvage and storage of food on farms; and appraisal of program policy relating to rehabilitation of facilities on farms.

D. *Deputy Administrator, State and County Operations.* The Deputy Administrator, State and County Operations, is primarily responsible for the administration through State and county committees and offices of the production adjustment, price support, CCC-owned storage facility, agricultural conservation, land use, disaster livestock feed, defense and related programs, including program compliance and aerial photography; and the payment and production aspects of the Sugar Act. The Deputy Administrator, State and County Operations, provides administrative direction and supervision to Area Directors and assigned Divisions, Staffs and Offices, namely: Farmer Programs, Aerial Photography, Conservation and Land Use, and Bin Storage Divisions, Disaster and Defense Services Staff, Area Directors, ASCS State and county offices, and the ASCS Caribbean Area Office. The Deputy Administrator, State and County Operations, is also Vice President of the Commodity Credit Corporation.

1. *Farmer Programs Division.* The Farmer Programs Division, under the general supervision of the Deputy Administrator, State and County Operations and within the framework of broad program policy, agency directives and legislative enactments, is responsible for the determination and implementation of operating policy, (except as assigned to the Aerial Photography, Bin Storage, and Conservation and Land Use Divisions and Disaster and Defense Services Staff) procedures and instructions applicable to programs involving direct dealings with farmers or assigned to ASCS State and county offices. It develops related national procedures and handbooks for use of State and county offices; provides uniform program and policy clarification and interpretation; serves as focal point with other divisions and staff offices and State offices on policy and program developments, recommendations and appraisals; and reviews, analyzes and evaluates program operations of State and county offices to insure workable and effective procedures and methods.

2. *Disaster and Defense Services Staff.* The Disaster and Defense Services Staff is responsible for the determination and implementation of operating program policy with respect to assigned programs. It provides for the implementation and operation of emergency feed programs for the relief of agriculture from the effects of any major disaster. It provides coordinating services to USDA State and County Defense Boards and USDA Regional Liaison Representatives. It provides a centralized service on damage assessment of resources under USDA jurisdiction; and carries out other defense activities as assigned.

3. *Aerial Photography Division.* The Aerial Photography Division is responsible for the determination and implementation of operating program policy with respect to assigned programs. It is responsible for formulating and administering over-all plans and policies for procuring, processing, and using aerial photography for determining farm operation compliance with programs and for the sale of aerial photographs to other government agencies and to individuals.

a. *Aerial Photography Laboratories.* The Aerial Photography Division maintains and operates two Aerial Photography Laboratories which plan, organize, and direct the photogrammetric service for ASCS and cooperating agencies. The Chiefs of Aerial Photography Laboratories report to the Director, Aerial Photography Division.

4. *Conservation and Land Use Division.* For the agricultural conservation payments, conservation reserve, and land use diversion programs and within broad policy over-all agency directives and provisions of legislative enactments, the Conservation and Land Use Division is responsible for: (a) Determination of the need for operating policy, procedures, instructions, and program clarification and interpretation; (b) serving as the focal point of coordination with and between other staffs, divisions, and offices concerned with policy and program development and operations; and reviewing, analyzing and evaluating program operation activities to insure effective program administration.

5. *Bin Storage Division.* The Bin Storage Division formulates and administers programs pertaining to CCC bin storage operations including: managing the inventories within the bin sites; contracting for and maintaining bin sites; the protection, quality maintenance and handling of commodities stored therein; and direction of sales of grain by county offices.

6. *Area Directors.* The Area Directors have responsibility within specific geographic areas for the administration of assigned Agricultural Stabilization

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[1] See paragraph III F4 for policy-making authority.

and Conservation programs within ASCS State and county offices and the ASCS Caribbean Area Office. The Area Directors are responsible for the activities of ASC State Committees within the established policies and procedures and assist in coordinating the program activities of ASCS State and county offices in their respective areas. They make recommendations to the Deputy Administrator, State and County Operations for appointments to the ASC State Committee and other items pertinent to personnel matters in their respective areas. The Area Directors also carry out assigned defense activities. The Area Directors report to the Deputy Administrator, State and County Operations.

a. *ASC State Committees and the Director, ASCS Caribbean Area.* ASC State Committees and the Director, ASCS Caribbean Area recommend and suggest agricultural programs applicable to the State or Area. They coordinate the execution of agricultural conservation and stabilization, production adjustment, price support, conservation reserve, sugar conditional payments programs, and other assigned programs, and carry out assigned defense activities. They direct and coordinate the activities of county offices. The ASC State Committee and the Director of the ASCS Caribbean Area Office report to the Area Director having responsibility for the geographic area to which the specific State or Area is assigned. The Hawaii ASC State Committee does not have any responsibility for the sugar conditional payments program. This program is carried out in Hawaii under the direction of the State Executive Director who, for this purpose, reports to the Southwest Area Director.

(1) *ASC County Committees.* ASC County Committees recommend and suggest to the ASC State Committee agricultural programs applicable to the county. ASCS County Offices execute agricultural conservation and stabilization, production adjustment, price support, conservation reserve, sugar conditional payments programs and other assigned programs requiring direct dealings with the farmer. They also carry out assigned defense activities. The ASC County Committees report to their particular ASC State Committee. The Hawaii ASCS county offices do not have any responsibility for the sugar conditional payments programs.

E. *Deputy Administrator, Commodity Operations.* The Deputy Administrator, Commodity Operations, is primarily responsible for the administration through Commodity Offices of the acquisition, storage (except CCC-owned storage), management and disposition of all CCC-owned commodities acquired under the price support loan and purchase agreement programs, including maintenance of trade relationships. The Deputy Administrator, Commodity Operations, provides program interpretations to approved program policy, and provides administrative and program direction and coordination to assigned Divisions, staffs and offices, namely: Inventory Management Division, Procurement and Sales Division, the ASCS Commodity Offices located in Evanston, Illinois, Kansas City, Missouri, Minneapolis, Minnesota, and New Orleans, Louisiana, and the Cotton Products and Export Operations Office in New York City; and carries out assigned defense activities. The Deputy Administrator, Commodity Operations, is also Vice President of the Commodity Credit Corporation.

1. *Inventory Management Division.* The Inventory Management Division formulates, develops and coordinates a broad comprehensive inventory management program for ASCS, CCC, including: storage and handling standards, guides and practices, uniform and special storage and handling agreements, examination and approval of warehouses, diversification, care and management of inventories, emergency storage programs, technical transportation advice and assistance, ship charter negotiations and space bookings. It provides appropriate instructions, interpretations and reviews pertaining to assigned functions, and carries out assigned defense activities including furnishing data concerning CCC stocks to the Disaster and Defense Services Staff for damage assessment.

2. *Procurement and Sales Division.* The Procurement and Sales Division, on the basis of approved dockets, directives and other authorities, directs, conducts, or arranges for agency offices or other agents, governmental or non-governmental, to acquire or dispose of commodities. It studies national and international marketing situations for use in determining timing of procurement and disposition activities, including pricing. It develops terms and conditions of contracts and agreements; accepts or rejects bids; and issues shipping authorizations to commodity offices.

3. *Commodity Offices.* There are four ASCS Commodity Offices which report to the Deputy Administrator, Commodity Operations. The Commodity Offices execute assigned inventory management, acquisition, disposition and related program activities, and carry out assigned defense activities. These Commodity Offices are located at the following addresses and have program responsibilities for the areas indicated:

Evanston ASCS Commodity Office,
Agricultural Stabilization and
Conservation Service,
U.S. Department of Agriculture,
2201 Howard Street,
Evanston, Illinois.

The Evanston Commodity Office is responsible for grain in the following States:

Connecticut.
Delaware.
Florida.
Georgia.
Illinois.
Indiana.
Iowa.
Kentucky.
Maine.
Maryland.
Massachusetts.
Michigan.
Minnesota.
Montana.
New Hampshire.
New Jersey.
New York.
North Carolina.
North Dakota.
Ohio.
Pennsylvania.
Rhode Island.
South Carolina.
South Dakota.
Tennessee.
Vermont.
Virginia.
West Virginia.
Wisconsin.

Kansas City ASCS Commodity Office,
Agricultural Stabilization and
Conservation Service,
U.S. Department of Agriculture,
8930 Ward Parkway,
P.O. Box 205,
Kansas City, Missouri.

The Kansas City Commodity Office is responsible for grain in the following States:

Alabama.
Arizona.
Arkansas.
California.
Colorado.
Idaho.
Kansas.
Louisiana.
Mississippi.
Missouri.
Nebraska.
Nevada.
New Mexico.
Oklahoma.
Oregon.
Texas.
Utah.
Washington.
Wyoming.

It has nationwide responsibility for: Peanuts, Rice, Tung Oil, and Naval Stores.

Minneapolis ASCS Commodity Office,
Agricultural Stabilization and
Conservation Service,
U.S. Department of Agriculture,
6400 France Avenue, South,
Minneapolis 10, Minnesota.

The Minneapolis Commodity Office has nationwide responsibility for processed commodities.

New Orleans ASCS Commodity Office,
Agricultural Stabilization and
Conservation Service,
U.S. Department of Agriculture,
Wirth Building, 120 Marais Street,
New Orleans 16, Louisiana.

The New Orleans Commodity Office has nationwide responsibility for cotton, cottonseed, and cottonseed products.

4. *Cotton Products and Export Operations Office (New York, N.Y.).* The Cotton Products and Export Operations Office administers the export equalization payments program for cotton products. It has the responsibility on loss and damage claims arising on Section 416 commodities while in transit from port of export or while in foreign storage. It acts as liaison with shipping agents and others for ASCS Commodity Offices on commodity exports.

F. *Deputy Administrator, Management.* The Deputy Administrator, Management, is primarily responsible for the over-all management program in ASCS–CCC including the policy and technical direction and coordination of all data processing activities in ASCS. The Deputy Administrator, Management, provides administrative supervision and direction to assigned divisions, staffs and field offices and carries out assigned defense activities. Assigned divisions, staffs and offices are: Administrative Services, Budget, Fiscal, Information, and Personnel Management Divisions, Operations Analysis Staff, Data Processing Center, Kansas City, Missouri, and the Management Field Office, Kansas City, Missouri. The Deputy Administrator, Management, is also Vice President of the Commodity Credit Corporation.

1. *Administrative Services Division.* The Administrative Services Division formulates and administers administrative services policies and programs for ASCS–

CCC, including records, procedures, reports, forms, communications, procurement, property, leasing, printing, and related office services; operates or supervises the operation of administrative services in ASCS, and provides technical direction over administrative services activities in field offices.

2. *Budget Division.* The Budget Division formulates and administers ASCS and CCC budget plans, policies, presentations, and procedures, covering all funds utilized, including administrative expense funds, corporate capital funds, funds appropriated for payments to farmers, funds allocated from other sources, and other funds; and exercises technical direction over budgetary activities of ASCS field offices.

3. *Fiscal Division.* The Fiscal Division formulates and administers fiscal and claims policies for ASCS and CCC; develops, implements and installs systems, accounts, methods, and procedures relating to CCC financing and to accounting for programs and program activities financed with ASCS, CCC and other funds, including administrative funds; analyzes financial and operating data and prepares financial statements; and exercises technical direction over fiscal activities of ASCS offices and fiscal agents.

4. *Information Division.* The Information Division formulates and administers a comprehensive information service program, including current releases, background statements, technical and popular publications, educational services, annual and special reports, radio and television scripts, and other information material for authorized dissemination to the public and to the trade. The division formulates and recommends information policy to the Administrator. Over-all information policy is determined by the Administrator.

5. *Operations Analysis Staff.* The Operations Analysis Staff provides national leadership and coordination to agency efforts at achieving progressive management policies and operating systems with special emphasis on mechanization and data processing, organizational planning, work measurement, manpower utilization, management improvement, and related activities.

6. *Personnel Management Division.* The Personnel Management Division formulates and administers personnel management policies and programs for ASCS-CCC including organization analysis. The Division installs, maintains, operates, or supervises the operation of the personnel management program in ASCS; and provides technical direction over personnel management activities of field offices.

7. *Data Processing Center, Kansas City, Missouri.* The Data Processing Center, Kansas City, Missouri, plans and conducts a centralized data processing and accounting function applicable for grain price support loan, purchase agreement, and for other programs and activities as assigned.

8. *Management Field Office, Kansas City, Missouri.* The Management Field Office, Kansas City, Missouri is responsible for planning and conducting a comprehensive management operations program comprising personnel management, office services, space, records, procurement, and property management activities, fiscal services including all voucher examination and related allotment and general accounting for administrative expenses, and necessary billing and related accounting for specified reimbursable services to meet the operational needs of the ASCS field offices as assigned.

IV. *Contracting and claims officers and representatives of the Secretary*—A. *CCC Contracting Officers.* CCC Contracting Officers are appointed by the Executive Vice President, CCC, or by Division and ASCS Commodity Office Directors with the approval of the Executive Vice President of the Commodity Credit Corporation and may to the extent authorized by their appointment execute contracts relating to activities of the Commodity Credit Corporation for which the Division or office is responsible. The names of such officers and information with respect to their authority may be obtained from the appropriate Director.

B. *Representatives of the Secretary.* Representatives of the Secretary are appointed by Division and ASCS Commodity Office Directors, subject to the written approval of the Administrator, Agricultural Stabilization and Conservation Service, and may, to the extent authorized by their appointment, execute contracts relating to the activities under commodity programs approved pursuant to section 32 of the Act of August 24, 1935, as amended, or section 6 of the National School Lunch Act for which the division or office is responsible. The names of such officers and information with respect to their authority may be obtained from the appropriate Director.

C. *CCC Claims Officers.* CCC Claims Officers are appointed by the Executive Vice President, CCC; or by Division and ASCS Commodity Office Directors with the approval of the Executive Vice President of the Commodity Credit Corporation and may settle certain types of claims by and against the Commodity Credit Corporation. The names of such officers and information with respect to their authority may be obtained from the appropriate director.

D. *Contract Disputes Board for Commodity Credit Corporation.* The members of Contract Disputes Board for CCC are appointed by the Board of Directors of CCC with the approval of the Secretary of Agriculture. The Board has jurisdiction to act for and on behalf of CCC and its officers (a) to consider and determine appeals by claimants on contract claims against CCC involving doubtful or disputed questions of fact or law where settlement of adjustment cannot otherwise be effected under established policies and procedures, (b) upon request of the Executive Vice President or other officer of CCC, to exercise the authority of the Executive Vice President or other officer in connection with (1) any contract claim by or against CCC, including settlement and adjustment of any such claim, and (2) the suspension or debarment of any contractor, and (c) to act for the head of the agency or for any other officer of CCC to whom appeals may be taken from findings of fact by a contracting officer under any contract disputes provision which provides a method for final and conclusive determination of disputed questions of fact. The decisions of the Board on all matters falling within its jurisdiction are final for administrative purposes within the Department of Agriculture. The names of such members and information with respect to their authority may be obtained from the Secretary, Commodity Credit Corporation.

V. *Delegations of authority*—A. *Administrator.* The Administrator formulates and administers programs assigned to ASCS under delegated authority from the Secretary of Agriculture (19 F.R. 74, as amended). This includes authority to execute any document, authorize any expenditure, promulgate any rule, regulation, order, or instruction required by law or deemed by him to be necessary and proper to the discharge of the functions assigned to the ASCS, and take any other actions incident to the discharge of such functions. This authority is exercised under the general direction and supervision of the Assistant Secretary in charge of Agricultural Marketing and Stabilization and is subject to the general responsibilities of the Secretary to the President and to Congress.

In no case does any delegation of authority to the Administrator preclude the Secretary, Under Secretary, or the appropriate Assistant Secretary, from exercising any of the powers or functions so delegated. With the exception of authorities which are restricted from redelegation, the Administrator may delegate his authority and provide for the redelegation thereof to appropriate officers and employees. General delegations of authority are cited in paragraphs VB and VC.

B. *Members of the Administrator's Immediate Staff.* Subject to any restrictions on redelegation of authority by heads of agencies, the Administrator has delegated to the Associate Administrator authority to act for him in his absence or inability to act, including the exercise of all powers and authorities which he himself holds, to the Directors, Policy Staffs authority to establish and interpret program policies, to the Deputy Administrator, Management, authority to establish and interpret management policies, and to the Deputy Administrator, State and County Operations, the Deputy Administrator, Commodity Operations, and the Deputy Administrator, Management, authority to establish and interpret operations policies, institute activities and operations, execute documents, issue instructions and orders, and perform any other actions necessary to the performance of their assigned functions and responsibilities, as currently assigned or as hereafter assigned to them. Except when redelegation is specifically prohibited, this authority includes the power of redelegation.

In the absence of the Administrator and the Associate Administrator, the Deputy Administrators shall serve as Acting Administrator in the following order of precedence: Deputy Administrator, State and County Operations, Deputy

Administrator, Commodity Operations, Deputy Administrator, Management. In the absence of the Administrator, Associate Administrator, and all Deputy Administrators, the Executive Assistant to the Administrator shall serve as Acting Administrator.

C. *Directors of Divisions and ASCS Commodity Offices.* Under the general supervision and direction of the Administrator or of the Deputy Administrator who has been specifically assigned responsibility for direction of the programs and activities involved, the directors of all divisions of the ASCS and directors of all ASCS commodity offices are authorized, in connection with the performance of their assigned functions and responsibilities, to execute contracts, agreements, and other documents, to perform any other actions necessary thereto, and to settle and adjust CCC claims within limitations established by the Commodity Credit Corporation. All authorities shall be exercised within the confines of administrative and functional areas of jurisdiction and, in the case of ASCS commodity offices, in accordance with commodity assignments or geographic areas of jurisdiction. All authorities and responsibilities relating to Commodity Credit Corporation shall be exercised in accordance with the by-laws of Commodity Credit Corporation. Current functions and responsibilities are set forth in paragraph III C, D. With the exception of authorities which are restricted from redelegation, this authority includes the power of redelegation. This statement of authority shall not be construed as waiving any restrictions, limitations, or requirements stated in the specific delegation of authority or imposed in governing policies, rules, regulations, or procedures.

VI. *Availability of records and information.* Any person desiring information or to make submittals or requests with respect to the programs and functions of this Service, should address his request to: Administrator, Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture, Washington, D.C., or to the Director of the particular division or office, Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture, Washington, D.C. The records of the Service and its Divisions and Offices are available for examination in accordance with rules and designations of records issued by the Secretary.

VII. *Prior authorization and delegations.* The statement of Organization and Functions and Delegations of Authority of Agricultural Stabilization and Conservation Service issued May 11, 1962 (27 F.R. 4523), is hereby superseded. All subdelegations of authority relating to any function covered by such superseded statement or by this statement shall remain in effect except as they are inconsistent herewith or are hereafter amended or revoked. Nothing herein shall affect the validity of any action heretofore taken under previous delegations or subdelegations of authority or assignment of functions.

Signed at Washington, D.C., this 26th day of April 1963.

H. D. Godfrey,
Administrator, Agricultural Stabilization and Conservation Service.

Approved:

Orville L. Freeman,
Secretary of Agriculture.

[F.R. Doc. 63-4680; Filed, May 1, 1963; 8:50 a.m.]

CIVIL AERONAUTICS BOARD

[Docket 14214]

ALLEGHENY AIRLINES, INC.; "USE IT OR LOSE IT" INVESTIGATION

Notice of Prehearing Conference

Notice is hereby given that a prehearing conference in the above-entitled investigation is assigned to be held on May 15, 1963, at 11:00 a.m. (eastern daylight saving time) in Room 803, Universal Building, Connecticut and Florida Avenues NW., Washington, D.C., before Examiner Merritt Ruhlen.

Dated at Washington, D.C., April 29, 1963.

[SEAL] Francis W. Brown,
Chief Examiner.

[F.R. Doc. 63-4667; Filed, May 1, 1963; 8:49 a.m.]

FEDERAL COMMUNICATIONS COMMISSION

[Docket Nos. 14318, 14319; FCC 63-367]

COLUMBIA BASIN MICROWAVE CO.

Memorandum Opinion and Order Amending Issues

In re applications of Columbia Basin Microwave Company, Docket No. 14318, File No. 1464-C1-R-61, for renewal of the license for station K0Y40, a facility in the Domestic Public Point-to-Point Microwave Radio Service at Ephrata, Washington; Docket No. 14319, File No. 4082-C1-AL-61; for consent to assignment of the license for station K0Y40, a facility in the Domestic Public Point-to-Point Microwave Radio Service at Ephrata, Washington from Patricia Hughes, d/b as Columbia Basin Microwave Company to Columbia Basin Microwave Company, Inc.

1. The Commission has before it for consideration two petitions filed herein by Columbia Basin Microwave Company: the first, a Petition for Reconsideration filed January 14, 1963; the second, a Petition to Enlarge Issues filed January 18, 1963. The Common Carrier Bureau filed pleadings responsive to both, and Columbia made timely replies thereto. Because the pleadings raise substantially the same question, they will be considered jointly.

2. Columbia seeks reconsideration of the Commission's Order released December 18, 1962 (FCC 62-1311) by which its earlier Petition for Reconsideration and Grant was denied, on the basis of the Commission's alleged failure to consider an argument advanced by Columbia in its earlier petition. The pleadings before us earlier presented only in skeletal form the position now argued strenuously by Columbia. Accordingly, the Commission does not feel that the brevity of its Order of December 18, 1962, was unwarranted by the pleadings before it at that time, and Columbia's contention that it was denied "administrative due process" through the Commission's failure to expressly rule on the question which it only now presents in completed form is rejected.[1] However, Columbia's petition may be regarded as a petition for reconsideration and grant, pursuant to § 1.192 of the Commission's rules, for which no temporal or numerical limitation is prescribed.[2]

3. It is the thrust of Columbia's petition that the Commission has illegally based its hearing herein upon a substantive interpretation and application of § 21.709 of the rules, particularly paragraph (a) thereof, which provides as follows:

> Upon filing application for renewal of station license of a radio system in the Domestic Public Point-to-Point Microwave Radio Service, each such common carrier licensee who does not also operate a telephone or telegraph wireline system shall make a factual showing that, during the preceding license period, at least 50 percent of the total hours of service rendered over the radio system, and not less than 50 percent of the radio channels therein, have been used by subscribers not directly controlling or controlled by, or under direct or indirect common control with, the applicant.

4. Columbia correctly points out that § 21.709 was adopted by the Commission as a procedural rule, without affording interested parties an opportunity to comment thereon. The Common Carrier Bureau, in its opposition to Columbia's petition to enlarge issues, concedes that this rule may not be applied substantively, and the Commission concurs therein. Our views on this matter are more fully developed in Paragraphs 5 and 6 below. To the extent, therefore, that the orders designating this and similar applications for hearing might be given a contrary construction, such should be read in light of the procedural nature of the rule.

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[1] The Commission did not fail to consider the matter, but stated: "* * * the ultimate question of petitioner's continued eligibility in this radio service should be based on a full evidentiary record, and not on the interlocutory pleadings here before us * * *"

[2] For this reason, the Common Carrier Bureau's position that the instant petition falls within the prohibition, in § 1.84(a) of the rules of petitions for reconsideration of interlocutory actions, is rejected. In any event, grant of the instant relief would involve final disposition of the applications, a "fundamental" exception to the policy of non-review: see Radio One Five Hundred, Inc., 22 RR 1090a (1962).

5. Columbia also correctly points out that the correct test of common carrier status is generally whether the carrier holds itself out to serve the public without discrimination. However, where there is no public need for a common carrier facility, it cannot be disputed that the Commission has the authority—in fact, the duty—to deny the utilization of a frequency, reserved for service to the public, solely for the operation of a private business—particularly since other frequencies are allocated and available for the purpose of providing private noncommon carrier microwave service. Evidence of public need may be found in the existence of subscribers unconnected with the applicant, or in facts which indicate a reasonable likelihood that the facilities will in the future be used by non-related subscribers. On the other hand, a lack of public subscribers and a failure to show a reasonable likelihood of future use by the public strongly indicate an absence of public need.

6. The purpose of § 21.709 is to ensure that the Commission is provided with the information upon which to determine whether the requisite public need exists. A showing meeting the 50 percent tests of § 21.709(a) qualifies the applicant for renewal on this score without further inquiry. A lesser showing, made pursuant to § 21.709(b), does not necessarily require or warrant denial of the application. It may indicate, however, that the issue of public need should be subjected to scrutiny in an evidentiary hearing. Columbia, in its application for renewal of K0Y4O, showed no service to unrelated subscribers, and no firm evidence of future demand. While it submitted with its application a letter from Empire T.V. Systems, Inc., requesting service from a microwave link not then in existence, together with a letter showing that a discussion had been had with another prospective customer, we did not deem this showing sufficient—in the absence of an evidentiary hearing—to justify a conclusion that a public need for the continued operation of the common carrier facility existed. Accordingly, the instant hearing was ordered.

7. The above discussion makes it clear that the Petition for Reconsideration must be denied, for Columbia has yet to supply the answers to the questions properly raised in the designation order.

8. We turn now to Columbia's Petition to Enlarge Issues. Columbia recognizes the untimeliness of its petition, which comes nearly fifteen months after the order designating the proceeding for hearing, but seeks to excuse it on the basis of the Commission's action adding issues in Black Hills Video Corporation (see Memorandum Opinion and Order released January 8, 1963, FCC 63-18). Such added issues concerned (a) possible amortization of existing equipment, (b) availability, suitability, and cost of equipment necessary if applicant were to operate its system in the Business Radio Service, (c) when applicant was first informed of the necessity of making the § 21.709 showing at renewal time,[3] and (d) possible stay of the effective date of a final decision denying the renewal application. To the extent that the instant petition requests addition of the Black Hills issues, its lack of timeliness may be excused. The Bureau does not oppose the addition of such issues, and the petition will therefore be granted in this respect. To the extent, however, that Columbia seeks modification of existing issues or addition of other new issues, the request comes so late that it must clearly be denied.

9. Consideration of the merits of Columbia's request would not alter this result. Columbia requests modification of Issue (a) and the addition of an issue to determine the existence, source, and reasonableness of the Commission's requirement that a renewal applicant show public usage of its facilities. Its predicate for both requests is the same as that for its petition for reconsideration, discussed supra; i.e., that § 21.709 is being given substantive application here. Our disposition of the petition for reconsideration herein should lay to rest applicant's fears in this regard, and leaves no justification for modification of the issues in the manner suggested.

10. Finally, Columbia requests that hearing upon the Black Hills issue (other than the "knowledge" issue) be deferred until it is determined under the other issues that its renewal application must be denied. Such is contrary to normal Commission procedure, and could well delay the ultimate decision herein rather than accelerate it: Cf. Head of the Lakes Broadcasting Co., 9 RR 1160 (1953). Such request will, therefore, be denied.

Accordingly, it is ordered, This 23d day of April 1963, that the issues in the above-captioned proceeding are enlarged to include the following:

(g) To determine the facts with respect to applicant's investment in the captioned microwave system, the cost of maintaining such system, the condition of said system, the extent to which applicant's investment in said system has been amortized by applicant and the reasonable period of time required by applicant to recover any unamortized portion of such investment.

(h) To determine the facts with respect to the availability of equipment for use by the applicant in the Business Radio Service, the suitability of such equipment in light of the requirements of the applicant's system, the cost of installing and maintaining such equipment, the trade-in value of its present equipment, and the cost of converting its present equipment for use in the Business Radio Service.

(i) To determine when and under what circumstances the applicant or any of its principals or managerial staff was first informed that it would be required on renewal to show usage of its facilities by non-related subscribers.

(j) To determine, if in light of the evidence adduced on issues (a) through (f) the captioned application for renewal is denied, whether, in view of the evidence adduced on issues (g) through (i) the effective date of the Commission's final decision should be stayed in order to afford applicant a reasonable period of time in which to recover the unamortized portion of its investment in the aforesaid microwave system and, if so, to determine the length of such stay.

It is further ordered, That Columbia's Petition for Reconsideration filed January 14, 1963, is denied, and that its Petition to Enlarge Issues, filed January 18, 1963, is granted to the extent reflected above, and in all other respects is denied.

Released: April 25, 1963.

FEDERAL COMMUNICATIONS
COMMISSION,[4]
[SEAL] BEN F. WAPLE,
Acting Secretary.

[F.R. Doc. 63-4682; Filed, May 1, 1963; 8:50 a.m.]

[Docket No. 15050; FCC 63-374]

MUNCIE BROADCASTING CORP.

Memorandum Opinion and Order Designating Application for Hearing on Stated Issues

In re application of Muncie Broadcasting Corporation, Muncie, Indiana, Docket No. 15050, File No. BP-15125; requests: 990 kc, 250 w, DA, Day, Class II, for construction permit.

1. The Commission has before it the above-captioned and described application for a construction permit, and a "Petition to Deny" filed December 4, 1962 by WONE, Inc., licensee of Station WONE, Dayton, Ohio.

2. The WONE, Inc. petition requests that the application either be denied or be designated for hearing on the ground that the proposed new station would cause objectionable adjacent channel interference to the present operation of Station WONE. An interference study, based upon data submitted by the applicant, indicates that the applicant's proposal would cause WONE interference involving an area of 1030.4 square miles and a population of 56,348 persons, 2.98 percent of the population, within that station's normally protected primary service area.

3. In view of the foregoing, the Commission is of the opinion that substantial and material questions of fact are presented by the application, and that it should, therefore, be designated for hearing, with the licensee of Station WONE a party thereto, on the issues set forth below.

Accordingly, it is ordered, This 23d day of April 1963, that, pursuant to section 309(e) of the Communications Act of 1934, as amended, the instant application is designated for hearing, at a time and place to be specified in a subsequent Order, upon the following issues:

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[3] Columbia seeks modification of this "knowledge" issue to permit a determination of whether the applicant was informed of such requirement. As presently framed, however, the issue is sufficiently broad to permit a showing that applicant was not informed of the requirement, and the requested modification is deemed unnecessary.

[4] Statement of Commissioner Bartley in which he concurs in part and dissents in part is filed as part of the original document. Commissioner Ford absent.

1. To determine the areas and populations which would receive primary service from the proposed operation, and the availability of other primary service to such areas and populations.

2. To determine whether the instant proposal would cause objectionable interference to Station WONE, or any other existing standard broadcast stations, and, if so, the nature and extent thereof, the areas and populations affected thereby, and the availability of other primary service to such areas and populations.

3. To determine, in the light of the evidence adduced pursuant to the foregoing issues, whether a grant of the instant application would serve the public interest, convenience, and necessity.

It is further ordered, That WONE, Inc., licensee of Station WONE, Dayton, Ohio, is made a party to the proceeding.

It is further ordered, That the burden of proceeding with the introduction of evidence and the burden of proof with respect to the above-stated issues is hereby placed upon the applicant.

It is further ordered, That the petition filed December 4, 1962, by WONE, Inc., is granted to the extent indicated above and is denied in all other respects.

It is further ordered, That, in the event of a grant of the application, the construction permit shall contain the following condition: This authorization is subject to compliance by permittee with any applicable procedures of the FAA.

It is further ordered, That, to avail themselves of the opportunity to be heard, the applicant and party respondent herein, pursuant to § 1.140 of the Commission's rules, in person or by attorney, shall, within 20 days of the mailing of this Order, file with the Commission in triplicate a written appearance stating an intention to appear on the date fixed for the hearing and present evidence on the issues specified in this Order.

It is further ordered, That, the applicant herein shall, pursuant to section 311(a)(2) of the Communications Act of 1934, as amended, and § 1.362(b) of the Commission's rules, give notice of the hearing, within the time and in the manner prescribed in such rule, and shall advise the Commission of the publication of such notice as required by § 1.362(h) of the rules.

Released: April 29, 1963.

FEDERAL COMMUNICATIONS
COMMISSION,[1]
[SEAL] BEN F. WAPLE,
Acting Secretary.

[F.R. Doc. 63-4683; Filed, May 1, 1963;
8:50 a.m]

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[1] Commissioner Ford absent.

[Docket No. 15053]

DALE M. SAYLES

Order To Show Cause

In the matter of Dale M. Sayles, Tillamook, Oregon, Docket No. 15053; order to show cause why there should not be revoked the license for Radio Station KOE 531 in the Special Emergency Radio Service.

The Commission, by the Chief, Safety and Special Radio Services Bureau, under delegated authority, having under consideration the matter of certain alleged violations of the Commission's rules in connection with the operation of the above-captioned station;

It appearing, that, pursuant to § 1.76 of the Commission's rules, written notice of violation of the Commission's rules was served upon the above-named licensee at his address of record as follows: Official Notice of Violation dated February 19, 1963, alleging violation of § 10.161 (a) and (c), and § 10.155(e) of the Commission's rules.

It further appearing, that said licensee did not reply to such communication or to a follow-up letter dated March 7, 1963, also mailed to the licensee at his address of record; and

It further appearing, that, in view of the foregoing, the licensee has repeatedly violated § 1.76 of the Commission's rules;

It is ordered, This 25th day of April 1963, pursuant to section 312 (a)(4) and (c) of the Communications Act of 1934, as amended, and § 0.291(b)(8) of Part 0 of the Commission's rules, that the said licensee show cause why the license for the above-captioned radio station should not be revoked, and appear and give evidence in respect thereto at a hearing to be held at a time and place to be specified by subsequent order; and

It is further ordered, That the Acting Secretary send a copy of this order by Certified Mail—Return Receipt Requested to the said licensee at his last known address of P.O. Box 309, Tillamook, Oregon.

Released: April 26, 1963.

FEDERAL COMMUNICATIONS
COMMISSION,
[SEAL] BEN F. WAPLE,
Acting Secretary.

[F.R. Doc. 63-4684; Filed, May 1, 1963;
8:50 a.m]

[Docket Nos. 14909, 14910; FCC 63M-507]

SOUTHERN RADIO AND TELEVISION CO. AND ROBERT HECKSHER (WMYR)

Order Continuing Hearing

In re applications of Southern Radio and Television Co., Lehigh Acres, Florida, Docket No. 14909, File No. BP-14297; Robert Hecksher (WMYR), Fort Myers, Florida, Docket No. 14910, File No. BP-14378; for construction permits.

By letter to the Hearing Examiner dated April 26, 1963, counsel for Southern Radio and Television Co. has requested that certain procedural dates be further extended because it has been asked to supply additional pre-hearing information. The other parties have no objection to extension.

Accordingly, it is ordered, This 26th day of April 1963, that the letter request is granted, and procedural dates are further extended as follows:

Receipt of notification of witnesses desired for cross-examination—from April 25 to May 24, 1963.

Hearing—from April 30 to May 28, 1963, at 10 a.m.

Released: April 29, 1963.

FEDERAL COMMUNICATIONS
COMMISSION,
[SEAL] BEN F. WAPLE,
Acting Secretary.

[F.R. Doc. 63-4685; Filed, May 1, 1963;
8:50 a.m.]

[Docket No. 15005; FCC 63M-495]

K-FIV, INC. (KFIV)

Order Continuing Hearing

In re application of K-FIV, Inc. (KFIV), Modesto, California, Docket No. 15005, File No. BP-15033; for construction permit.

A prehearing conference in the above-entitled matter having been held on April 24, 1963, and it appearing from the record made therein that certain agreements were reached and certain rulings made which should be formalized by order:

It is ordered, This 24th day of April 1963, that:

(1) The direct affirmative case of the applicant shall be presented entirely in the form of sworn written exhibits;

(2) Copies of the applicant's proposed exhibits shall be supplied the other parties hereto on or before May 24, 1963, but such proposed exhibits may be amended or reformed prior to June 7, 1963;

(3) Copies of the applicant's exhibits in final form shall be supplied the other parties hereto on or before June 7, 1963;

(4) Any party wishing to call for cross-examination any witness responsible for the preparation of any of the applicant's exhibits shall give notification thereof on or before June 14, 1963; and,

(5) In the event the applicant desires to take measurements, he shall notify all other parties and the Hearing Examiner of such intention on or before May 8, 1963, and such notification shall include the identity of the person to take the measurements and the time at which they are to be taken in order that any party wishing to do so may observe the taking of the measurements:

It is further ordered, That the hearing now scheduled to commence on May 20, 1963, is continued to June 24, 1963, commencing at 10:00 a.m., in the offices of the Commission at Washington, D.C.

Released: April 25, 1963.

FEDERAL COMMUNICATIONS COMMISSION,
[SEAL] BEN F. WAPLE,
Acting Secretary.

[F.R. Doc. 63-4686; Filed, May 1, 1963; 8:50 a.m.]

FEDERAL MARITIME COMMISSION

MEMBER LINES OF JAVA/NEW YORK FREIGHT AGREEMENT, ET AL.

Notice of Filing of Agreement

Notice is hereby given that the following described agreement has been filed with the Commission for approval pursuant to section 15 of the Shipping Act, 1916 (39 Stat. 733; 75 Stat. 763; 46 U.S.C. 814):

Agreement 8916, between the Member Lines of The Java/New York Freight Agreement (90) and Straits Steamship Co. Ltd.; Kie Hock Shipping Co. Ltd.; Guan Guan Limited; and, P. N. Pelajaran Nasional Indonesia, establishes a transhipment agreement for movement of through cargo from Indonesian outports (excluding the East Coast of Sumatra between Langsa and Indragiri, both included) to U.S. Atlantic and Gulf Coast ports, in accordance with terms and conditions set forth in the agreement.

Interested parties may inspect this agreement and obtain copies thereof at the Bureau of Foreign Regulation, Federal Maritime Commission, Washington 25, D.C., or may inspect a copy at the offices of the District Managers of the Commission in New York, N.Y., New Orleans, La., and San Francisco, Calif., and may submit to the Secretary, Federal Maritime Commission, Washington 25, D.C., within 20 days after publication of this notice in the FEDERAL REGISTER, written statements with reference to the agreement and their position as to approval, disapproval, or modification, together with a request for hearing, should such hearing be desired.

Dated: April 29, 1963.

By order of the Federal Maritime Commission.

THOMAS LISI,
Secretary.

[F.R. Doc. 63-4668; Filed, May 1, 1963; 8:49 a.m.]

UNITED STATES LINES AND OZEAN STINNES LINES

Notice of Filing of Agreement

Notice is hereby given that the following described agreement has been filed with the Commission for approval pursuant to section 15 of the Shipping Act, 1916 (39 Stat. 733; 75 Stat. 763; 46 U.S.C. 814):

Agreement 9150, between the United States Lines Company and the carriers comprising the Ozean Stinnes Lines joint service (operating under approved Joint Service Agreement 8089), covers an arrangement whereby the parties will confer and agree with each other from time to time on the matters of rates, terms, and conditions of the carriage of cargo, in the trade from continental European ports in the Bordeaux/Hamburg range to U.S. Atlantic ports in the Cape Hatteras/Key West range.

Interested parties may inspect this agreement and obtain copies thereof at the Bureau of Foreign Regulation, Federal Maritime Commission, Washington 25, D.C., or may inspect a copy at the offices of the District Managers of the Commission in New York, N.Y., New Orleans, La., and San Francisco, Calif., and may submit to the Secretary, Federal Maritime Commission, Washington 25, D.C., within 10 days after publication of this notice in the FEDERAL REGISTER, written statements with reference to the agreement and their position as to approval, disapproval, or modification, together with a request for hearing, should such hearing be desired.

Dated: April 29, 1963.

By order of the Federal Maritime Commission.

THOMAS LISI,
Secretary.

[F.R. Doc. 63-4669; Filed, May 1, 1963; 8:49 a.m.]

[Docket No. 1034]

NORTH ATLANTIC MEDITERRANEAN FREIGHT CONFERENCE EXCLUSIVE PATRONAGE (DUAL RATE) CONTRACT

Interim Approval of Amendment to Exclusive Patronage (Dual Rate) System

The North Atlantic Mediterranean Freight Conference, Agreement 7980, has filed a request for permission under section 14b of the Shipping Act, 1916, to modify the scope of its exclusive patronage dual rate system to include those ports north of Portland, Maine, to and including Eastport, Maine, which, by virtue of the approval of Agreement 7980-5, are now within the scope of the conference.

North Atlantic Mediterranean Freight Conference amended its dual rate contract and filed such amended contract with the Commission pursuant to section 3 of Public Law 87-346. Said section 3 provides that such contracts so amended will remain lawful for a period not beyond April 3, 1964, and that prior to such time the Commission shall approve, disapprove, cancel or modify such dual rate contracts.

Notice of the filing of the request for permission to enlarge the scope of the North Atlantic Mediterranean Freight Conference's dual rate system was published in the FEDERAL REGISTER on February 27, 1963, and interested persons were invited to comment thereon. No comments were received by the Commission pursuant to such publication.

Examination fails to show that the proposed modification to the conference dual rate system is unjustly discriminatory or unfair, detrimental to the commerce of the United States, or contrary to the public interest.

Therefore, it is ordered, That, pursuant to section 14b of said Act and without prejudice to the future action of the Commission pursuant to section 3 of Public Law 87-346, as amended, permission is granted to enlarge the scope of the said conference dual rate system to include the ports mentioned above.

By the Commission, April 25, 1963.

THOMAS LISI,
Secretary.

[F.R. Doc. 63-4670; Filed, May 1, 1963; 8:49 a.m.]

[No. 1106]

[Agreement No. 8650]

CALCUTTA, EAST COAST OF INDIA AND EAST PAKISTAN/U.S.A. CONFERENCE

Order of Investigation

An agreement, assigned Federal Maritime Commission No. 8650 has been filed for approval under section 15 of the Shipping Act, 1916. If approved, Agreement No. 8650 would establish the Calcutta, East Coast of India/U.S.A. Conference covering the trade from the East Coast of India and East Pakistan ports in the range from Chittagong, Pakistan, to, but not including Tuticorin, India, to United States Atlantic and Gulf of Mexico ports in the range from Searsport, Maine, to Brownsville Texas.

Simultaneously with approval of Agreement 8650, the following approved agreements would be superseded and canceled:

6500—Calcutta/U.S.A. Conference.
8560—Calcutta/U.S.A. South Atlantic and Gulf Freight Conference.
8570—East Coast of India (Calcutta and Tuticorin excluded) and East Pakistan/U.S.A. Atlantic and Gulf Freight Conference.

In addition to Agreement 8650, the parties thereto have filed with the Commission for approval under section 14b of the Shipping Act, 1916, a proposed exclusive patronage (dual rate) agreement ("Freight Contract") for use in this trade.

Section 15 of the Shipping Act, 1916, requires the Commission to disapprove, cancel or modify any agreement which it finds to be unjustly discriminatory or unfair between carriers, shippers, exporters, importers, or ports, or between exporters of the United States and their foreign competitors, or to operate to the detriment of the commerce of the United States, or to be contrary to the public interest, or in violation of the Shipping Act. In addition, section 15 provides:

> No * * * agreement shall be approved * * * between carriers not members of the same conference or conferences of carriers serving different trades that would otherwise be naturally competitive, unless in the case of agreements between carriers, each carrier, or in the case of agreements between conferences, each conference, retains the right of independent action * * *

The Commission has determined that an investigation should be instituted to determine whether the establishment of a single conference of carriers including within its scope various trades which have traditionally been served by individual conferences is detrimental to the commerce of the United States or contrary to the public interest or is unjustly discriminatory or unfair as between carriers, shippers, exporters, importers, or ports, or between exporters from the United States and their foreign competitors, or otherwise contrary to the provisions of section 15 or in violation of any provision of the Shipping Act, 1916. An additional purpose of the investigation is to seek to determine whether any of the trades included within the scope of Agreement 8650 are or should be considered naturally competitive within the meaning of section 15, and if so, whether, and to what extent the requirement of retention of the right of independent action by carriers or conferences serving trades naturally competitive is applicable to approval of Agreement 8650 and the dissolution of the several conferences now serving the trades in question.

In addition, the proceeding instituted herein should determine whether the proposed "Freight Contract" meets the requirements of section 14b of the Shipping Act, 1916, and may be approved by the Commission for use in connection with Agreement 8650, if approved.

Therefore, it is ordered, That pursuant to sections 14b, 15 and 22, an investigation is hereby instituted to determine:

(1) Whether Agreement 8650 establishing the Calcutta, East Coast of India/U.S.A. Conference should be approved under section 15 of the Shipping Act, 1916, and

(2) Whether the "Freight Contract" filed for use in connection with Conference Agreement 8650, if approved under section 15, should be approved under section 14b, Shipping Act, 1916, and

That, the common carriers by water listed below are hereby made respondents in this proceeding.

That, this matter be assigned for hearing before an Examiner of the Commission's Office of Hearing Examiners at a date and place to be determined by the Chief Examiner.

This order and notice of hearing shall be published in the FEDERAL REGISTER; a copy of this order and a notice of hearing shall be served upon respondents.

All persons (including individuals, corporations, associations, firms, partnerships, and public bodies) having an interest in this proceeding and desiring to intervene therein, should file petitions for leave to intervene and serve copies thereof on respondents, with 15 copies of petitions to the Secretary of the Commission, on or before May 2, 1963.

Any request for the production of documents, etc., to be made at the prehearing conference herein scheduled to be held at Washington, D.C. on May 2, 1963, shall be served on all parties and a copy mailed to the Presiding Examiner not less than five (5) days prior to the prehearing conference.

By order of the Commission, April 9, 1963.

[SEAL] THOMAS LISI,
Secretary.

CALCUTTA, EAST COAST OF INDIA AND EAST PAKISTAN/U.S.A. CONFERENCE

MEMBER LINES

American Export Lines, Inc., 26 Broadway, New York 4, N.Y.
Central Gulf Lines—Joint Service, 1 Whitehall Street, New York 4, N.Y.
Hellenic Lines Limited, 39 Broadway, New York 6, N.Y.
Isthmian Lines, Inc., States Marine-Isthmian Agency, Inc., 90 Broad Street, New York 4, N.Y.
Orient Mid-East Lines, 29 Broadway, New York 6, N.Y.
Scindia Steam Navigation Co., Ltd. (The), U.S. Navigation Co., Inc., 17 Battery Place, New York 4, N.Y.
Thos. & Jno. Brocklebank, Ltd., (Brocklebank's Cunard Line), 25 Broadway, New York 4, N.Y.

[F.R. Doc. 63-4671; Filed, May 1, 1963; 8:50 a.m.]

OFFICE OF EMERGENCY PLANNING

NOTICE OF WITHDRAWAL OF REQUEST TO PARTICIPATE IN THE ACTIVITIES OF THE INTEGRATION COMMITTEE ON THE M14 RIFLE, 7.62MM

The plan and Regulations of the Ordnance Corps for the Formation, Organization, and Functioning of the Integration Committee on the M14 Rifle, 7.62MM formed pursuant to section 708 of the Defense Production Act of 1950, as amended, has served the purpose for which it was formed. Accordingly, the request published in 26 F.R. 9327, October 3, 1961, to participate in the formation and activities of that Committee in accordance with the "Plan and Regulations of the Ordnance Corps for the Formation, Organization, and Functioning of the Integration Committee on the M14 Rifle, 7.62MM" transmitted to and accepted by those companies listed in the above cited FEDERAL REGISTER and in 26 F.R. 11508, December 5, 1961, has been withdrawn.

The immunity from prosecution under the Federal antitrust laws and the Federal Trade Commission Act heretofore granted to those companies has been likewise withdrawn, except as to those acts performed or omitted by reason of the request which occurred prior to that withdrawal.

(Sec. 708, 64 Stat. 818, as amended; 50 U.S.C. App. Sup. 2158; E.O. 10480, August 14, 1953, 18 F.R. 4939; Reorganization Plan No. 1 of 1958, 23 F.R. 4991; as amended; E.O. 11051, September 27, 1962, 27 F.R. 9683)

Dated: April 26, 1963.

EDWARD A. MCDERMOTT,
Director,
Office of Emergency Planning.

[F.R. Doc. 63-4633; Filed, May 1, 1963; 8:45 a.m.]

SECURITIES AND EXCHANGE COMMISSION

[File No. 1-3421]

CONTINENTAL VENDING MACHINE CORP.

Order Summarily Suspending Trading

APRIL 26, 1963.

The common stock, 10 cents par value, of Continental Vending Machine Corp., being listed and registered on the American Stock Exchange and having unlisted trading privileges on the Philadelphia-Baltimore-Washington Stock Exchange, and the 6 percent convertible subordinated debentures due September 1, 1976 being listed and registered on the American Stock Exchange; and

The Commission being of the opinion that the public interest requires the summary suspension of trading in such securities on such Exchanges and that such action is necessary and appropriate for the protection of investors; and

The Commission being of the opinion further that such suspension is necessary in order to prevent fraudulent, deceptive or manipulative acts or practices, with the result that it will be unlawful under section 15(c)(2) of the Securities Exchange Act of 1934 and the Commission's Rule 15c2-2 thereunder for any broker or dealer to make use of the mails or of any means or instrumentality of interstate commerce to effect any transaction in, or to induce or attempt to induce the purchase or sale of any such security, otherwise than on a national securities exchange:

It is ordered, Pursuant to section 19(a)(4) of the Securities Exchange Act of 1934, that trading in such securities on the American Stock Exchange and the Philadelphia-Baltimore-Washington Stock Exchange be summarily suspended in order to prevent fraudulent, deceptive or manipulative acts or practices, this order to be effective for the period April 27, 1963, through May 6, 1963, both dates inclusive.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Secretary.

[F.R. Doc. 63-4657; Filed, May 1, 1963; 8:48 a.m.]

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

ALASKA

Notice of Proposed Withdrawal and Reservation of Lands

The United States Coast Guard has filed an application, Serial Number A-059041 for the withdrawal of the lands described below, from all forms of appropriation under the public land laws, including the mining and mineral leasing laws. The applicant desires the land for construction of a Coast Guard Rescue Station.

For a period of 30 days from the date of publication of this notice, all persons who wish to submit comments, suggestions, or objections in connection with the proposed withdrawal may present their views in writing to the undersigned officer of the Bureau of Land Management, Department of the Interior, 555 Cordova Street, Anchorage, Alaska.

If circumstances warrant it, a public hearing will be held at a convenient time and place, which will be announced.

The determination of the Secretary on the application will be published in the FEDERAL REGISTER. A separate notice will be sent to each interested party of record.

The lands involved in the application are:

INDIAN POINT NEAR AUKE BAY, ALASKA

U.S. Survey 3811—Lot 2.

Containing 28.16 acres.

GEORGE R. SCHMIDT,
Chief, Branch of Lands and Minerals Operations.

[F.R. Doc. 63-4653; Filed, May 1, 1963; 8:47 a.m.]

CALIFORNIA

Notice of Proposed Withdrawal and Reservation of Lands; Correction

APRIL 25, 1963.

The notice of Proposed Withdrawal and Reservation of Lands published on Pages 3936 and 3937 of the FEDERAL REGISTER, issued Wednesday, April 25, 1962 (F.R. Doc. 62-3997; Filed, Apr. 24, 1962; 8:45 a.m.) is hereby corrected by deleting sec. 28, lots 3, 7, and 8, E½E½; and replacing it with sec. 28, lots 3, 7, and 8, S½N½NE¼NE¼, S½NE¼NE¼, SE¼NE¼, and E½SE¼. Also, the number of acres is corrected by deleting 20,153.56 acres and replacing it with 20,143.56 acres.

CHARLES L. SCHAEFER,
Acting Manager, Land Office, Riverside.

[F.R. Doc. 63-4654; Filed, May 1, 1963; 8:47 a.m.]

[Classification 65; Offer No. 27]

NEW MEXICO

Small Tract Classification

1. Pursuant to authority delegated to me by Bureau Order No. 684, dated August 28, 1961 (26 F.R. 8216), I hereby offer for sale at public auction under the Small Tract Act of June 1, 1938 (52 Stat. 609; 43 U.S.C. 682a), as amended, fifty-one tracts listed in Part 3 of this order.

2. The lands are located 10 to 15 miles from Albuquerque, New Mexico, within the foothills of the Sandia Mountains. U.S. Highway 66 and New Mexico State Highway 44 provide easy access to the two areas involved. The topography is gently sloping to rough with some areas embracing steep slopes. Sheet and rill erosion is moderate. Elevation approximates 6,000 feet above sea level and precipitation is approximately 8 to 12 inches annually. The average frost-free period is 140 days. Vegetation is made up of desert grasses, juniper with pinon and pine on a few tracts. Culinary water is available within reasonable depths but no irrigation is available to these lands. Electric power and natural gas are available within the areas. The lands are suitable for homesite and recreational development.

3. The tracts vary in size from 2.49 acres to 5.51 acres. The land will be sold subject to existing rights-of-way for roads; electric transmission lines and other rights-of-way for streets, roads, and public utilities will be reserved as shown on following page. All minerals are reserved to the United States.

T. 13 N., R. 4 E., N.M.P.M.

SECTION 34

Unit	Legal description	Acres	Rights-of-way				Value
	Lot(s)		*20'*	*33'*	*40'*	*66'*	
1	5*	2.94					$500
2	6 [1]	2.59		(2)			475
3	7, 8	5.51		(3)			625
4	9, 10	5.47		West			625
5	11	2.73	(4)	East	(4)		500
6	12	2.72			(5)		400
7	13, 14**	5.41					625
8	15, 16***	5.37					625
9	17, 24	5.17			(6)		475
10	18, 23****	5.17					625
11	19, 22#	5.16					375
12	20, 21##	5.16					375
13	48, 49	5.00	East		(7)		400
14	47, 50	4.98	West		South		625
15	46, 51###	4.99			(8)		625
16	44, 45	5.00			East [9]		625
17	52, 53	5.00			(10)		625
18	25	2.50			East		500
19	26	2.49					350
20	42, 43	4.98			(11)		550
21	54, 55	4.98			(12)		625
22	27, 28####	4.98					575
23	41, 56	4.98			(13)		575
24	29, 30	4.98	East [14]				600
25	39, 40	4.98		East	(15)		575
26	58	2.49		East	(16)		400
27	38	2.49		West			500
28	59	2.50		West		(17)	500
29	60 [a]	2.49					500
30	37	2.49					475
31	31, 32	4.98				South	625
32	33, 34	4.98		East [A]		South	625
33	35, 36	4.98		West [B]			625
34	NE¼NE¼SE¼SE¼ [b]	2.5					625
35	SE¼NE¼SE¼SE¼ [c]	2.5					625
36	NW¼SW¼SE¼SE¼	2.5	West	South			625
37	61, 62	4.99	East	(18)		(19)	625
38	83, 84	4.99	East	(20)	South		500
39	63, 82	5.00			South [d]		600
40	57, 64 [33]	4.98			(34)		600
41	81	2.49			(21) and (22)		400
42	65, 80	4.98	(23)		(24) and (25)		625
43	66, 79	4.98	(27)		(26)		625
44	67, 68	4.99	(28)		(29)		625
45	77, 78	4.99	East [D]		South		625
46	69, 76	5.00	(30)		South [E]		450
47	70, 75	4.99	(31)		(32)		400
48	71, 74	4.98					625
49	72, 73	5.00					625
	T. 10 N., R. 6 E., N.M.P.M.						
50	Sec. 5: E½SE¼SW¼SW¼	5.00					$625
51	Sec. 6: S½SE¼SW¼SE¼	5.00					450

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*100' along South boundary for State Road 44.

[1] 100' along North boundary for State Road 44 and powerline NM-015035 along North boundary.

[2] 33' along West boundary beginning at SW corner; thence North along boundary for approximately 250' to Highway 44 R/W.

[3] Beginning at SE corner; thence North along East boundary for approximately 260' to Highway 44 R/W.

[4] 20'—Beginning at SE corner; thence West along South boundary 205.0'; thence at 40' width N. 49°35' W. 163.0' to a point on West boundary 105.7' North of SW corner.

[5] 40'—Centerline begins 105.7' North of SE corner on East boundary; thence North 63°32' W. 367.6' to a point on West boundary 88.4' South of NW corner.

**Cul de Sac—25' radius from a point 88.4' South and 15' North 63°32' W. of NE corner, lot 13.

***Cul de Sac—25' radius from a point 20' West and 15' North of SE corner, lot 16.

[6] 40'—Centerline begins at a point on South boundary, lot 24 144.0' West of SE corner; thence N. 14°15' W. 340.0'; thence N. 26° W. 182.5'; thence N. 78°30' W. 22.1' to a point on West boundary, lot 17, which is 182.8' South of NW corner, lot 17.

****Cul de Sac—25' radius from a point 182.8' South and 15' North 78°30' West from NE corner, lot 18.

#Cul de Sac—25' radius from a point on West boundary 15' North of SW corner, lot 22.

##Cul de Sac—25' radius from a point on East boundary 15' North of SE corner, lot 21.

[7] 40'—Centerline begins on East boundary 42.7' North of SE corner of lot 48; thence North 37°0' W. 412.1' to a point on West boundary, lot 48, which is 40' south of NW corner, lot 48.

[8] 40'—Centerline begins at a point on South boundary, lot 51, 21.4' East of SW corner lot 51; thence N. 43° W., 29.3' to a point on West boundary which is 20' North of SW corner, lot 51.

###Cul de Sac—25' radius from a point 180.5' North and 15' N. 55° West of SE corner, lot 51.

[9] 40'—Centerline begins 146.6' West of SE corner, lot 44 on South boundary; thence N. 46°9' W., 356.6'; thence N. 39°52' W., 108.3' to a point on North boundary of lot 45, which is 144.0' West of NE corner of lot 45.

[10] 40'—South boundary of lot 53; and 40'—Centerline begins at a point 20' North of SE corner lot 52; thence West along South boundary lot 52, 100.0'; thence N. 55° W., 279.9' to a point on West boundary, lot 52, which is 180.5' North of SW corner same lot; and 40'—Centerline begins at a point 20' West and 140.8';South of NE corner, lot 53; thence North along lot boundary to North boundary same lot; and 40'—Centerline begins at a point on East boundary lot 53, which is 140.8' South of NE corner same lot; thence N. 46°9' W., 203.3' to a point on North boundary, which is 146.6' West of NE corner, same lot.

[11] 40′—North boundary lot 43; and 40′—Centerline begins on South boundary lot 42, which is 148.4′ West of SE corner, lot 42; thence North 2°8′ West, 73.4′; thence N. 21°21′ W., 165.0′; thence N. 53°34′ W., 139.5′ to a point 20′ South of NW corner, lot 42.

[12] 40′—Centerline begins 130.0′ West of SE corner, lot 54, on South boundary; thence N. 46°26′ W., 204.0′; thence N. 46°9′ W., 70.1′ to a point on West boundary 140.8′ South of NW corner, lot 54 and 40′—Centerline begins 130.0′ West and 20′ North of SE corner lot 54; thence West 199.3′ to a point on West boundary 20′ North of SW corner.

####Cul de Sac—25′ radius from a point 85.2′ West and N. 46°9′ W., 15′ from SE corner, lot 28.

[13] 40′—Centerline begins 118.0′ West of SE corner lot 56 on South boundary; thence N. 57°37′ W., 244.7′; thence N. 38°35′ W., 9.6′ to a point on West boundary lot 56, which is 138.4′ North of SW corner, same lot. And: 40′—Centerline begins 81.9′ South of NE corner lot 41, on East boundary; thence N. 46°9′ W., 118.2′ to a point on North boundary which is 85.2′ West of NE corner of same lot.

[14] 20′—East boundary lot 30; and 20′—Begins on North boundary lot 30, 104.1′ East of West boundary same lot; thence East 125.2′ to East boundary, same lot. 33′—East boundary lot 39.

[15] 40 ′—Centerline begins at a point on the South boundary lot 40, which is 75.3′ West of SE corner lot 40; thence N. 43°43′ W., 59.3′; thence N. 46°9′ W., 295.7′ to a point on West boundary lot 40, which is 81.9′ South of NW corner, lot 40.

[16] 40′—Centerline begins at a point on East boundary, lot 58, which is 57.6′ N. of SE corner; thence N. 63°15′ W., 312.0′; thence N. 43°43′ W., 73.8′ to a point on West boundary, lot 58, which is 78.7′ South of NW corner, same lot.

[17] 33′—West boundary, lot 59; 66′—Centerline begins on South boundary at a point 76.8′ East of SW corner lot 59; thence N. 54°51′ W., 93.9′ to a point on the West boundary which is 57.6′ N. of SW corner same lot.

[a] Cul de Sac—25′ radius from a point on East boundary which is 15′ North of SE corner lot 60.

[A] —33′ along East boundary lot 34.

[B] —33′ along West boundary lot 35.

[b] Cul de Sac—25′ radius from a point on South boundary NE¼NE¼SE¼SE¼ which is 15′ East of the SW corner of the land described.

[c] Cul de Sac—25′ radius from a point on North boundary SE¼NE¼SE¼SE¼ which is 15′ East of NW corner of land described.

[18] 33′—Along South boundary, lot 61 beginning at East boundary; thence West 183.0′ and

[19] 66′—Centerline begins at a point on South boundary, lot 61 which is 183.0′ West of SE corner; thence N. 50°10′ W., 489.0′; thence N. 54°51′ W., 29.2′ to a point on North boundary, lot 62 which is 76.8′ East of NW corner lot 62.

[20] 33′—Beginning on East boundary lot 84; thence West along North boundary, lot 84, 222.1′ and 20′—East boundary lot 84.

[d] 40′—South boundary lot 82.

[21] 40′—Centerline begins at a point on East boundary lot 81, 20′ N. of SE corner thence West 156.6′; thence N. 45°55′ W., 86.0′; thence N. 40°28′ W., 128.8′; thence N. 6°18′ W., 153.1′ to a point on North boundary 11.8′ East of NW corner lot 81.

[22] 40′—Centerline begins at a point 156.6′ West and 20′ North of SE corner, lot 81; thence N. 79°5′ W., 76.0′; thence N. 72°7′ W., 109.6′ to a point on West boundary of lot 81 which is 65.1′ North of SW corner, lot 81.

[23] Variable width to 20′ in lot 65. Centerline—40′ begins at a point in lot 64 on South boundary lot 64; at a point 11.8′ East of SW corner, thence N. 4°5′ W., 112.0′ thence N. 26°39′ W., 8.0′ to a point 119.0′ N. of SE corner lot 65.

[24] 40′—Centerline begins at a point on East boundary lot 65, which is 119.0′ N. of SE corner same lot; thence N. 26°39′ W., 224.4′, thence N. 57°37′ W., 19.0′ to a point on North boundary, lot 65 which is 118.0′ West of NE corner lot 65.

[25] 40′—Centerline begins at a point on East boundary lot 80, which is 65.1′ North of SE corner lot 80; thence N. 72°7′ W., 204.0′; thence North 83°42′ W., 135.8′ to a point on West boundary lot 80, which is 142.6′ North of SW corner same lot.

[26] 40′—Centerline begins at a point on East boundary, lot 79 which is 142.6′ North of SE corner lot 79; thence N. 83°42′ W., 91.1′; thence South 19°15′ E., 140.5′ to a point 37.3′ West and 20′ North of SE corner; thence West along South boundary, lot 79—292.0′ to West boundary lot 79.

[27] 20′—Along West boundary lot 79: and 20′—beginning at South boundary lot 66; thence North along West boundary same lot 116.1′.

[28] 20′—Begins at South boundary lot 67; thence North along East boundary same lot 77′ and

[29] 40′—Centerline begins at a point on East boundary lot 67, which is 77.0′ North of SE corner same lot; thence N. 27°20′ W., 285.0′ to a point on North boundary same lot 130.0′ West of NE corner.

[D] 20′—East boundary lot 78;

[E] 40′—South boundary lot 76;

[30] 20′—along West boundary lot 76; and begins on South boundary lot 69; thence North along West boundary, 64.8′.

[31] 20′—along East boundary lot 75 and: Begins at South boundary lot 70, thence North along East boundary 43.5′.

[32] 40′—Centerline begins at a point on East boundary lot 70, which is 43.5′ North of SE corner same lot; thence N. 43° W., 421.0′ to a point on North boundary lot 70, which is 21.4′ East of NW corner.

[33] 31.8′ to 20′ width—Centerline begins at a point 11.8′ East of SW corner lot 64 on South boundary; thence N. 4°-5′ W., 112.0′; thence N. 26°39′ W., 8.0′ to a point on West boundary lot 64 which is 119.5′ N. of SW corner same lot.

[34] 40′—Centerline begins at a point on East boundary lot 57, which is 78.7′ South of NE corner; thence N. 43°43′ W., 108.9 to a point on the North boundary, lot 57 which is 75.3′ West of NE corner.

4. Classification of the above-described lands by this order segregates them from all forms of appropriations, including location under the mining laws, except as to applications under the mineral leasing laws.

5. The tracts will be offered at public auction at a public sale to be held in the Conference Room located on the third floor of the Albuquerque National Bank, Main Office, 123 Central Avenue NW., Albuquerque, New Mexico, on May 28 and 29 beginning at 10:30 a.m. each day. Bids may be made personally by the bidder or his agent at the sale or may be mailed. Bids sent by mail will be considered only if received at the Santa Fe Land Office, Bureau of Land Management, P.O. Box 1251 by 3:00 p.m. on May 27, 1963. No sale bid will be accepted if it is less than the appraised value of the tract. Oral bidding will be in increments to be announced at the sale. See Paragraph 3 for appraised value.

6. Persons who have previously acquired a tract under the Small Tract Act are not qualified to purchase a tract at the sale unless they can make a showing satisfactory to the Bureau of Land Management that the acquisition of another tract is warranted in the circumstances.

7. Each bid sent by mail must clearly show (a) the name and post office address of the bidder, (b) Offer No. 27 and (c) the land description of the tract for which the bid is made, described in accordance with Paragraph 3 of this order. Each bid must be accompanied by the full amount bid in the form of a certified or cashier's check, post office money order, or bank draft made payable to the Bureau of Land Management. Each bid must be enclosed in a separate envelope but payment need accompany only the highest bid, provided all other bids designate the envelope containing the payment. Each envelope must carry on its reverse the following information and nothing else: (a) Offer No. 27, May 28, 29, 1963, (b) The unit number of the tract for which the bid is made, described in accordance with Paragraph 3 of this order.

8. Each tract will be awarded to the highest qualified bidder. If the highest bid is oral, the bidder will be required to make payment for the tract at the close of bidding and a personal check will be acceptable for that purpose. Any person who is declared high bidder for any tract will automatically be disqualified from consideration for other tracts at the sale.

9. Any tract not sold when offered in this course of bidding (and on which no qualifying mailed bid has been received) will be reoffered at public auction upon the motion of any qualified bidder beginning at 10:30 a.m. June 5, 1963, at the Bureau of Land Management, Greer Building, 113 Washington Avenue, Santa Fe, New Mexico. The remaining tracts will continue to be subject to nomination and auction at that place each succeeding Wednesday (except holidays) for a period of 1 hour beginning at 10:30 a.m. until all tracts are sold or until the termination of the sale on November 27, 1963.

10. Inquiries concerning these lands should be addressed to the Manager, Land Office, Bureau of Land Management, P.O. Box 1251, Santa Fe, New Mexico, or to the District Manager, Bureau of Land Management, P.O. Box 733, Albuquerque, New Mexico. Information may also be obtained in person at the District Office, 1304 Fourth Street NW., Albuquerque, New Mexico.

CHESLEY P. SEELY,
State Director.

APRIL 25, 1963.

[F.R. Doc. 63–4655; Filed, May 1, 1963; 8:47 a.m.]

DEPARTMENT OF LABOR

Wage and Hour Division

CERTIFICATES AUTHORIZING EMPLOYMENT OF LEARNERS AT SPECIAL MINIMUM RATES

Notice is hereby given that pursuant to section 14 of the Fair Labor Standards Act of 1938 (52 Stat. 1060, as amended, 29 U.S.C. 201 et seq.), and Administrative Order No. 561 (27 F.R. 4001) the firms listed in this notice have been issued special certificates authorizing the employment of learners at hourly wage rates lower than the minimum wage rates otherwise applicable under section 6 of the Act. The effective and expiration dates, occupations, wage rates, number or proportion of learners, learning periods, and the principal product manufactured by the employer for certificates issued under general learner regulations (29 CFR 522.1 to 522.9) are as indicated below. Conditions provided in certificates issued under the supplemental industry regulations cited in the captions below are as established in those regulations.

Apparel Industry Learner Regulations (29 CFR 522.1 to 522.9, as amended, and 29 CFR 522.20 to 522.25, as amended).

The following learner certificates were issued authorizing the employment of 10 percent of the total number of factory production workers for normal labor turnover purposes. The effective and expiration dates are indicated.

Glen Berry Manufacturers Inc., Oswego, Kans.; effective 4–20–63 to 4–19–64 (boys' blue jeans and men's trousers).

Blue Bell, Inc., Columbia City, Ind.; effective 5–1–63 to 4–30–64 (men's and boys' dungarees).

Bur-Mac Corp., 364 North Thomas Street, Athens, Ga.; effective 4–20–63 to 4–19–64 (men's shorts and slacks).

Covington Industries, Inc., Opp, Ala.; effective 5–2–63 to 5–1–64 (men's shirts).

Cowden Manufacturing Co., Inc., Springfield, Ky.; effective 5–1–63 to 4–30–64 (men's and boys' work pants).

Dickson Manufacturing Co., Plant No. 2, 114 North Mulberry Street, Dickson, Tenn.; effective 4–21–63 to 4–20–64 (men's work shirts and jackets).

E & W Manufacturing Co., Illmo, Mo.; effective 4–30–63 to 4–29–64 (men's and boys' dungarees and ladies' and girls' jeans).

Ecru Manufacturing Co., Ecru, Miss.; effective 5–1–63 to 4–30–64 (men's cotton work shirts).

Elder Manufacturing Co., Carl Junction, Mo.; effective 4–16–63 to 4–15–64 (boys' and juveniles' shirts and pajamas).

Honoa Path Shirt Co., Simpsonville, S.C.; effective 4–27–63 to 4–26–64 (men's sport shirts).

Linn Manufacturing Co., Linn, Mo.; effective 5–1–63 to 4–30–64 (men's semidress trousers).

Monticello Manufacturing Co., Inc., a division of Kellwood Co., Monticello, Miss.; effective 4–24–63 to 4–23–64 (men's work trousers).

The Newton Co., Newton, Miss.; effective 5–1–63 to 4–30–64 (men's slacks).

Puritan Fashions Corp., First and South "A", Farmington, Mo.; effective 4–15–63 to 4–14–64 (ladies' slacks, shirts, blouses, and shorts).

Robville Manufacturing Co., Robersonville, N.C.; effective 4–22–63 to 4–21–64 (boys' pants and shirts).

J. H. Rutter-Rex Manufacturing Co., Franklinton, La.; effective 4–22–63 to 4–21–64 (men's cotton work pants).

Salant & Salant Inc., South First Street, Union City, Tenn.; effective 4–16–63 to 4–15–64 (men's cotton work shirts).

Sandye Shirt Corp., Portland, Tenn.; effective 4–20–63 to 4–19–64 (sport shirts, blouses, and dresses).

Spartans Industries, Inc., Smithville, Tenn.; effective 4–26–63 to 4–25–64 (men's and boys' sport shirts).

Stone Manufacturing Co., North, S.C.; effective 4–19–63 to 4–18–64 (men's shorts and children's playclothes—shorts, pedal pushers, sunsuits, shirts, and blouses).

Stone Manufacturing Co., Poinsett Highway, Greenville, S.C.; effective 4–17–63 to 4–16–64 (children's and ladies' cotton and nylon slips and children's playwear—sunsuits, shorts, blouses, pedal pushers, etc.).

Trousdale Manufacturing Co., Inc., Hartsville, Tenn.; effective 4–20–63 to 4–19–64 (ladies' blouses).

The following learner certificates were issued for normal labor turnover purposes. The effective and expiration dates and the number of learners authorized are indicated.

Blackwelder Manufacturing Co., Inc., Yadkinville Highway, Mocksville, N.C.; effective 4–21–63 to 4–20–64; 10 learners (boys' sport shirts).

Marvel Garment Co., 10 Ridge Road, Bangor, Pa.; effective 4–30–63 to 4–29–64; 10 learners (ladies' blouses).

Piedmont Garment Co., Inc., Harmony, N.C.; effective 4–20–63 to 4–19–64; 10 learners (ladies' blouses and smocks).

Steele Apparel Co., Steele, Mo.; effective 4–18–63 to 4–17–64; 10 learners (ladies' dresses).

Yori Joy Sportswear, Inc., Windber, Pa.; effective 4–16–63 to 4–15–64; 10 learners (children's outerwear jackets and snowsuits).

The following learner certificates were issued for plant expansion purposes. The effective and expiration dates and the number of learners authorized are indicated.

Aalfs Manufacturing Co., Spencer, Iowa; effective 5–7–63 to 11–6–63; 40 learners (boys' denim jeans).

Angus Garment Manufacturing Co., Newton Bridge Road, Athens, Ga.; effective 4–18–63 to 10–17–63; 10 learners (men's work pants, shirts, and jackets).

Bali Bra Manufacturing Co., Inc., 2445 Bedford Street, Johnstown, Pa.; effective 4–22–63 to 10–21–63; 50 learners (brassieres).

Glenn Berry Manufacturing, Inc., Oswego, Kans.; effective 4–20–63 to 10–19–63; 30 learners (boys' blue jeans and men's trousers).

Eileen Hope, Inc., 138 Cumberland Avenue, Duncannon, Pa.; effective 4–22–63 to 10–21–63; 10 learners (women's dresses).

Joceil Originals, Inc., Highway 56 South, Reidsville, Ga.; effective 4–30–63 to 10–29–63; 75 learners (women's blouses).

Rowland Manufacturing Co., Rowland, N.C.; effective 4–26–63 to 10–25–63; 100 learners (men's and boys' shirts).

Safford Manufacturing Corp., Safford, Ariz.; effective 4–15–63 to 10–14–63; 50 learners (women's and misses' underwear, nightwear, and negligees).

Glove Industry Learner Regulations (29 CFR 522.1 to 522.9, as amended, and 29 CFR 522.60 to 522.65, as amended).

Wells Lamont Corp., Eupora, Miss.; effective 4–15–63 to 10–14–63; 15 learners for plant expansion purposes (jersey work gloves).

Hosiery Industry Learner Regulations (29 CFR 522.1 to 522.9, as amended, and 29 CFR 522.40 to 522.43, as amended).

Van Raalte Co., Inc., Blue Ridge, Ga.; effective 4–17–63 to 10–16–63; 10 learners for plant expansion purposes (seamless).

Knitted Wear Industry Learner Regulations (29 CFR 522.1 to 522.9, as amended, and 29 CFR 522.30 to 522.35, as amended).

Huntley Knitting Mills, Inc., Box 419, York, S.C.; effective 4–23–63 to 10–22–63; 20 learners for plant expansion purposes (men's and ladies' sweaters).

Huntley Knitting Mills, Inc., Box 419, York, S.C.; effective 4–23–63 to 4–22–64; 5 percent of the total number of factory production workers for normal labor turnover purposes (men's and ladies' sweaters).

Kayser-Roth Hosiery Co., Dayton Division, Dayton, Tenn.; effective 5–2–63 to 5–1–64; 5 percent of the total number of factory production workers for normal labor turnover purposes (ladies' and children's tights).

J. E. Morgan Knitting Hills, Inc., 205 Center Street, Tamaqua, Pa.; effective 5–1–63 to 4–30–64; 5 percent of the total number of factory production workers for normal labor turnover purposes (men's and boys' underwear).

Russell Manufacturing Corp., Lebanon, Va.; effective 4–17–63 to 4–9–64; 5 percent of the total number of factory production workers for normal labor turnover purposes (women's and misses' underwear, whole and half slips, nightwear, and negligees) – (replacement certificate).

Safford Manufacturing Corp., Safford, Ariz.; effective 4–15–63 to 10–14–63; 50 learners for plant expansion purposes in the production of women's knitted garments (women's and misses' underwear, nightwear, and negligees).

Wolverine Knitting Mills, Inc., 120 North Jackson, Bay City, Mich.; effective 4–15–63 to 10–14–63; 20 learners for plant expansion purposes (women's and children's underwear and sleeping wear).

Wolverine Knitting Mills, Inc., 120 North Jackson, Bay City, Mich.; effective 4–23–63 to 4–22–64; 5 percent of the total number of factory production workers for normal labor turnover purposes (women's and children's underwear and sleeping wear).

Regulations Applicable to the Employment of Learners (29 CFR 522.1 to 522.9, as amended).

Advertisers Manufacturing Co., 415 East Oshkosh Street, Ripon, Wis.; effective 4–22–63 to 10–21–63; 5 percent of the total number of factory production workers for normal labor turnover purposes, in the occupation of sewing machine operator for a learning period of 240 hours at the rate of not less than $1.05 an hour (advertising caps, aprons, newsbags, and miscellaneous).

Southwest Wool Co., Post Office Box 87, Las Vagas, New Mexico; effective 4–22–63 to 10–21–63; 4 learners for plant expansion purposes, in the occupations of: (1) wool puller for a learning period of 480 hours at the rates of at least $1.00 an hour for the first 240 hours and not less than $1.05 an hour for the remaining 240 hours; and (2) skin pickler and bater, each for a learning period of 240 hours at the rate of at least $1.00 an hour. Learners may not be employed at special minimum wage rates in more than two learner occupations (wool pulling).

Each learner certificate has been issued upon the representations of the employer which, among other things, were that employment of learners at special minimum rates is necessary in order to prevent curtailment of opportunities for employment, and that experienced workers for the learner occupations are not available. Any person aggrieved by the issuance of any of these certificates may seek a review or reconsideration thereof within fifteen days after publication of this notice in the FEDERAL REGISTER pursuant to the provisions of 29 CFR 522.9. The certificates may be annulled or withdrawn, as indicated therein, in the manner provided in 29 CFR Part 528.

Signed at Washington, D.C., this 26th day of April 1963.

ROBERT G. GRONEWALD,
Authorized Representative of the Administrator.

APRIL 23, 1963.

[F.R. Doc. 63–4656; Filed, May 1, 1963; 8:48 a.m.]

INTERSTATE COMMERCE COMMISSION

FOURTH SECTION APPLICATIONS FOR RELIEF

APRIL 29, 1963.

Protests to the granting of an application must be prepared in accordance with Rule 1.40 of the general rules of practice (49 CFR 1.40) and filed within 15 days from the date of publication of this notice in the FEDERAL REGISTER.

LONG-AND-SHORT HAUL

FSA No. 38297: *Cement to Amarillo, Tex.* Filed by Texas-Louisiana Freight Bureau, Agent (No. 469), for interested rail carriers. Rates on cement, hydraulic, masonry, mortar, natural or Portland and concrete mix, dry, in carloads, subject to aggregate shipment of not less than 5 cars, from points in Texas, to Amarillo, Tex.

Grounds for relief: Market competition.

Tariff: Supplement 45 to Texas-Louisiana Freight Bureau, Agent, tariff I.C.C. 948.

FSA No. 38298: *Scrap iron or steel from Chicago, Ill., to Muskegon, Mich.*

Filed by Traffic Executive Association-Eastern Railroads, Agent (E.R. No. 2668), for interested rail carriers. Rates on scrap iron or steel, as described in the application, in carloads, from Chicago, Ill., to Muskegon, Mich.

Grounds for relief: Water competition.

Tariff: Supplement 28 to Chesapeake and Ohio Railway Company tariff I.C.C. 13824.

By the Commission.

[SEAL] HAROLD D. MCCOY,
Secretary.

[F.R. Doc. 63-4659; Filed, May 1, 1963; 8:48 a.m.]

CUMULATIVE CODIFICATION GUIDE—MAY

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Announcing: Volume 76A

UNITED STATES
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Pages 4381–4429

PART II

FEDERAL REGISTER

THE NATIONAL ARCHIVES OF THE UNITED STATES 1934

VOLUME 28 NUMBER 86

Washington, Thursday, May 2, 1963

Department of Health, Education, and Welfare
Food and Drug Administration

Proposed Regulations for Tests and Methods of Assay and Certification of Antibiotic Drugs

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Food and Drug Administration

[21 CFR Parts 146, 148e, 148i, 148j, 148o]

ANTIBIOTIC DRUGS

Proposed Regulations for Tests and Methods of Assay and Certification of Antibiotic Drugs Subject to the 1962 Amendments to Section 507 of the Federal Food, Drug, and Cosmetic Act

The Kefauver-Harrison Drug Amendments of 1962 provide that all antibiotic drugs intended for human use shall be subject to the certification provisions of sections 502(1) and 507 of the Federal Food, Drug, and Cosmetic Act. These amendments become effective May 1, 1963. Therefore, the Commissioner of Food and Drugs, pursuant to the provisions of the act (sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357), and under the authority delegated to him by the Secretary of Health, Education, and Welfare (25 F.R. 8625), proposes to issue the following amendments and new regulations to provide for tests and methods of assay and certification of certain antibiotic drugs:

1. It is proposed to amend § 146.1 in the following respects:

a. By adding to paragraph (c)(1) the following new subdivisions:

§ 146.1 Definitions and interpretations applicable to all certifiable antibiotic drugs.

* * * * *

(c) * * *

(1) * * *

(iii) The term "unit" applied to nystatin means the nystatin activity (potency) contained in 0.282 microgram of the nystatin master standard when dried for 2 hours at 40° C. and a pressure of 5 millimeters or less.

(iv) The term "unit" applied to polymyxin B means the polymyxin B activity (potency) contained in 1.272 micrograms of the polymyxin B master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

b. By adding to paragraph (c)(2) the following new subdivisions:

(c) * * *

(2) * * *

(x) The term "microgram" applied to amphomycin means the amphomycin activity (potency) contained in 0.935 microgram of the amphomycin master standard when dried for 4 hours at 60° C. and a pressure of 5 millimeters or less.

(xi) The term "microgram" applied to amphotericin A means the amphotericin A activity (potency) contained in 1.0 microgram of the amphotericin A master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xii) The term "microgram" applied to amphotericin B means the amphotericin B activity (potency) contained in 1.123 micrograms of the amphotericin B master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xiii) The term "microgram" applied to colistin means the colistin activity (potency) contained in 1.51 micrograms of the colistin master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xiv) The term "microgram" applied to colistin methanesulfonate means the colistin methanesulfonate activity (potency) contained in 1.93 micrograms of the colistin methanesulfonate master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xv) The term "microgram" applied to cycloserine means the cycloserine activity (potency) contained in 1.0 microgram of the cycloserine master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xvi) The term "microgram" applied to erythromycin means the erythromycin activity (potency) contained in 1.02 micrograms of the erythromycin master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xvii) The term "microgram" applied to gramicidin means the gramicidin activity (potency) contained in 1.0 microgram of the gramicidin master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xviii) The term "microgram" applied to griseofulvin means the griseofulvin activity (potency) contained in 1.0 microgram of the griseofulvin master standard.

(xix) The term "microgram" applied to kanamycin means the kanamycin activity (potency) contained in 1.30 micrograms of the kanamycin master standard.

(xx) The term "microgram" applied to neomycin means the neomycin activity (potency) contained in 1.43 micrograms of the neomycin master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xxi) The term "microgram" applied to novobiocin means the novobiocin activity (potency) contained in 1.033 micrograms of the novobiocin master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

(xxii) The term "microgram" applied to oleandomycin means the oleandomycin activity (potency) contained in 1.176 micrograms of the oleandomycin master standard.

(xxiii) [Reserved]

(xxiv) The term "microgram" applied to oxytetracycline means the oxytetracycline activity (potency) contained in 1.115 micrograms of the oxytetracycline master standard.

(xxv) The term "microgram" applied to paromomycin means the paromomycin activity (potency) contained in 1.333 micrograms of paromomycin master standard.

(xxvi) The term "microgram" applied to tyrothricin means the activity (potency) contained in 0.2 microgram of the gramicidin master standard.

(xxvii) The term "microgram" applied to vancomycin means the vancomycin activity (potency) contained in 1.25 micrograms of the vancomycin master standard.

(xxviii) The term "microgram" applied to viomycin means the viomycin activity (potency) contained in 1.355 micrograms of the viomycin master standard when dried for 3 hours at 60° C. and a pressure of 5 millimeters or less.

c. By adding to paragraph (d) the following new subparagraphs:

(d) * * *

(2) The term "amphotericin A working standard" means a specific lot of a homogeneous preparation of amphotericin A.

(3) The term "amphotericin B working standard" means a specific lot of a homogeneous preparation of amphotericin B.

* * * * *

(12) The term "amphomycin working standard" means a specific lot of homogeneous preparation of amphomycin.

(13) The term "colistin working standard" means a specific lot of a homogeneous preparation of colistin.

(14) The term "colistin methanesulfonate working standard" means a specific lot of a homogeneous preparation of colistin methanesulfonate.

(15) The term "cycloserine working standard" means a specific lot of a homogeneous preparation of cycloserine.

(16) The term "erythromycin working standard" means a specific lot of a homogeneous preparation of erthromycin.

(17) The term "gramicidin working standard" means a specific lot of a homogeneous preparation of gramicidin.

(18) The term "griseofulvin working standard" means a specific lot of a homogeneous preparation of griseofulvin.

(19) The term "kanamycin working standard" means a specific lot of a homogeneous preparation of kanamycin.

(20) The term "neomycin working standard" means a specific lot of a homogeneous preparation of neomycin.

(21) The term "novobiocin working standard" means a specific lot of a homogeneous preparation of novobiocin.

(22) The term "nystatin working standard" means a specific lot of a homogeneous preparation of nystatin.

(23) The term "oleandomycin working standard" means a specific lot of a homogeneous preparation of oleandomycin.

(24) [Reserved]

(25) The term "oxytetracycline working standard" means a specific lot of a homogeneous preparation of oxytetracycline.

(26) The term "paromomycin working standard" means a specific lot of a homogeneous preparation of paromomycin.

(27) The term "polymyxin B working standard" means a specific lot of a homogeneous preparation of polymyxin B.

(28) The term "vancomycin working standard" means a specific lot of a

homogeneous preparation of vancomycin.

(29) The term "viomycin working standard" means a specific lot of a homogeneous preparation of viomycin.

d. By changing paragraph (g) and the introduction to paragraph (h) to read:

(g) Except as specifically provided by the regulations in this chapter, no provision of any regulation shall be construed as exempting any certifiable antibiotic drug from any applicable provision of the act or any regulation thereunder.

(h) The regulations in this chapter, prescribing tests and methods of assay for antibiotic and antibiotic-containing drugs, shall not be construed as preventing the Commissioner from using any other test or method of assay in his investigations to determine whether or not:

2. It is proposed to amend Title 21, Chapter I by adding thereto the following new parts:

PART 148e—ERYTHROMYCIN

Sec.	
148e.1	Erythromycin.
148e.2	Erythromycin ethylcarbonate.
148e.3	Erythromycin glucoheptonate.
148e.4	Erythromycin lactobionate.
148e.5	Erythromycin estolate.
148e.6	Erythromycin stearate.
148e.7	Erythromycin ethylsuccinate.
148e.8	Erythromycin sulfate.
148e.9	Erythromycin ethylsuccinate dental powder.
148e.10	Erythromycin for oral suspension.
148e.11	Erythromycin ethylcarbonate for oral suspension.
148e.12	Erythromycin estolate for oral suspension.
148e.13	Erythromycin ethylsuccinate oral suspension.
148e.14	Erythromycin ointment.
148e.15	Erythromycin-neomycin sulfate ointment.
148e.16	Erythromycin-polymyxin B sulfate ointment.
148e.17	Erythromycin estolate capsules.
148e.18	[Reserved]
148e.19	Erythromycin glucoheptonate dental cones.
148e.20	Erythromycin glucoheptonate-polymyxin B sulfate for otic solution.
148e.21	Erythromycin sulfate-polymyxin B sulfate otic solution.
148e.22	Erythromycin estolate for pediatric drops.
148e.23	[Reserved]
148e.24	Erythromycin glucoheptonate for intravenous infusion.
148e.25	Erythromycin lactobionate for intravenous infusion.
148e.26	Erythromycin tablets.
148e.27	Erythromycin stearate tablets.
148e.28	Erythromycin estolate tablets.

AUTHORITY: §§ 148e.1 to 148e.28 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148e.1 Erythromycin.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin is the odorless, white to grayish-white or slightly yellow crystalline compound or a kind of erythromycin or a mixture of two or more such compounds. It is so purified and dried that:

(i) It contains not less than 900 micrograms of erythromycin base per milligram calculated on an anhydrous basis.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 10 percent.

(iv) Its pH in a saturated aqueous solution, prepared by using 100 milligrams of erythromycin per milliliter, is not less than 8.0 nor more than 10.5.

(v) It gives a positive identity test for erythromycin.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, pH, identity, and crystallinity.

(ii) Samples required: 10 packages, each containing not less than 500 milligrams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures:

(i) *Plate assay*—(*a*) *Cylinders (cups).* Use cylinders described under § 141a.1 (a) of this chapter.

(*b*) *Culture media.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F. Make nutrient agar as follows:

(*1*) For carrying the test organism:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Glucose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 6.5 to 6.6 after sterilization.

(*2*) For base and seed layers: Same formulation as above, except adjust the medium to pH 8.0 after sterilization.

(*c*) *Working standard.* Dry approximately 30 milligrams of the working standard for 3 hours at 60° C. and a pressure of 5 millimeters or less. Determine the dry weight and dissolve the dried working standard in sufficient methyl alcohol to give a concentration of 10,000 micrograms of erythromycin base per milliliter. Further dilute with 0.1*M* potassium phosphate buffer, pH 8.0, to give a stock solution of 1,000 micrograms of erythromycin base per milliliter. This stock solution may be kept under refrigeration for 14 days.

(*d*) *Preparation of sample.* Dissolve an accurately weighed amount of the sample (approximately 50 milligrams) in approximately 5.0 milliliters of methyl alcohol and further dilute in 0.1*M* potassium phosphate buffer, pH 8.0, to make a solution containing 1.0 milligram of erythromycin base per milliliter (estimated). Further dilute an aliquot to the reference point of the assay with 0.1*M* potassium phosphate buffer, pH 8.

(*e*) *Preparation of test organism.* The test organism is Sarcina lutea (ATCC 9341), which is maintained on slants of agar described under (*b*)(*1*) of this subdivision. Wash the organism from the agar slant with 3 milliliters of sterile sodium chloride solution onto a large agar surface such as that provided by a Roux bottle containing 300 milliliters of the agar described in (*b*)(*1*) of this subdivision. Spread the suspension of organism over the entire agar surface with the aid of sterile glass beads. Incubate for 24 hours at 32° C.–35° C., and then wash the resulting growth from the agar surface with about 50 milliliters of sterile sodium chloride solution. Standardize the suspension so that a 1:40 dilution of it will give 25 percent light transmission, using a suitable photoelectric colorimeter with a 580-millimicron filter and a 13-millimeter diameter test tube as an absorption cell. Run test plates to determine the quantity of the bulk suspension (usually 1.5 milliliters) that should be added to each 100 milliliters of agar to give clear, sharp zones of inhibition of appropriate size.

(*f*) *Preparation of plates.* Add 21 milliliters of the agar prepared as described in (*b*)(*2*) of this subdivision to each Petri dish (20 millimeters × 100 millimeters). Distribute the agar evenly on the plates and allow it to harden. Use the plates the same day they are prepared. Melt a sufficient amount of the agar described in (*b*)(*2*) of this subdivision, cool to 48° C., add the proper amount of the test organism as described in (*e*) of this subdivision, and mix thoroughly. Add 4 milliliters of this inoculated agar to each Petri dish. Distribute the agar evenly on the plates, cover with porcelain covers glazed on the outside, and allow to harden. After the agar has hardened, place six cylinders on the agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(*g*) *Standard curve.* Prepare daily in 0.1*M* potassium phosphate buffer, pH 8.0, from the stock solution described in (*c*) of this subdivision, concentrations of 0.64, 0.80, 1.0, 1.25, and 1.56 micrograms per milliliter. A total of 12 plates is used in the preparation of the standard curve, three plates for each solution except the 1.0 microgram per milliliter solution. The latter concentration is used as the reference point and is included on each plate. On each of three plates fill three cylinders with the 1.0 microgram per milliliter standard and the other three cylinders with the concentration under test. Thus, there will be thirty-six 1-microgram determinations and nine determinations for each of the other points on the curve. After the plates have incubated, read the diameters of the circles of inhibition. Average the readings of the 1.0 microgram per milliliter concentration and the readings of the point tested for each set of three plates, and average also all 36 readings of the 1.0 microgram per milliliter concentration. The average of the 36 readings of the 1.0 microgram per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 1.0 microgram per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 0.8-microgram concentration, the average of the 36 readings of the 1.0 microgram per milliliter concentration is 16.5 millimeters and the average of the

1.0 microgram per milliliter concentration of this set of three plates is 16.3 millimeters, the correction is +0.2 millimeter. If the average readings of the 0.8 microgram per millimeter concentration of these same three plates is 15.9 millimeters, the corrected value is then 16.1 millimeters. Plot these corrected values, including the average of the 1.0 microgram per milliliter concentration, on a 2-cycle semilog paper, using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points, either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L = Calculated zone diameter for the lowest concentration of the standard curve;

H = Calculated zone diameter for the highest concentration of the standard curve;

c = Average zone diameter of 36 readings of the 1.0 microgram per milliliter standard;

a, b, d, e = Corrected average values for 0.64, 0.80, 1.25, and 1.56 micrograms per milliliter solutions, respectively.

Plot the values obtained for L and H and connect with a straight line.

(*h*) *Assay.* Use three plates for each sample. Fill three cylinders on each plate with the standard 1.0 microgram per milliliter solution and three cylinders with the 1.0 microgram per milliliter (estimated) sample, alternating standard and sample. Incubate all plates, including those containing the standard curve, at 32° C.–35° C. overnight, and measure the diameter of each circle of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the 1.0 microgram per milliliter zone on the standard curve. If the average sample value is lower than the standard value, subtract the difference between them from the 1.0 microgram per milliliter value on the curve. From the standard curve, read the potencies corresponding to the corrected values of zone sizes.

(ii) *Spectrophotometric assay* — (*a*) *Reagents.*—(*1*) Alkali reagent: Dissolve 42 grams of tribasic sodium phosphate, dodecahydrate ($Na_3PO_4 \cdot 12H_2O$) in 125 milliliters of 0.5*N* sodium hydroxide, and add 100 milliliters of distilled water. Heat on a steam bath until solution results. Cool and dilute to 250 milliliters with distilled water. Filter before use.

(*2*) 0.05*N* sulfuric acid.

(*3*) 0.05*N* sodium hydroxide.

(*4*) Methyl alcohol (anhydrous), reagent grade.

(*5*) Erythromycin working standard solution: Dry approximately 70 milligrams of erythromycin working standard for 3 hours at 60° C. and a pressure of 5 millimeters or less. Determine the dry weight and transfer to a 500-milliliter volumetric flask. Dissolve in 50 milliliters of methyl alcohol, and dilute to 500 milliliters with distilled water. Mix well. This solution may be used for 1 week, if it is kept in a refrigerator.

(*b*) *Apparatus.* A spectrophotometer equipped with a hydrogen lamp source of ultraviolet radiation, and matched, rectangular 1-centimeter silica cells.

(*c*) *Standard erythromycin factor.* Transfer a 10-milliliter aliquot of erythromycin working standard solution to each of four 25-milliliter volumetric flasks. Pipette 1.0 milliliter of 0.05*N* sulfuric acid into two of the flasks, mix well, and set aside at room temperature for 60 minutes. Pipette 2.0 milliliters of alkali reagent into the other two flasks, mix well, and heat in a 60° C. constant temperature water bath for 15 minutes. After heating, transfer the flasks to an ice water bath and cool rapidly to room temperature. Determine the absorbance of these solutions at 236 millimicrons, using distilled water in the reference cell. After the two acid treated solutions have reacted for 60 minutes, pipette 1.0 milliliter of 0.05N sodium hydroxide into each flask. Pipette 20 milliliters of alkali reagent into each flask, mix well, and heat in a 60° C. constant temperature water bath for 15 minutes. Transfer the flasks to an ice water bath and cool rapidly to room temperature. Determine the absorbance of these solutions at 236 millimicrons, using distilled water in the reference cell.

$$\frac{\text{Standard absorbance} \; -\text{Standard blank absorbance}}{\text{Milligrams of standard}} \times \frac{1{,}000}{\text{Potency of the standard in micrograms per milligram}} = \text{Standard factor K.}$$

Standard factor K = The actual absorbance equivalent to 1 milligram of 100 percent erythromycin base when diluted to a volume of 500 milliliters as outlined in subsection (*a*) of this subdivision.

(*d*) *Samples.* Transfer approximately 100 milligrams of sample, accurately weighed, to a 500-milliliter volumetric flask. Dissolve in 50 milliliters of methyl alcohol and dilute to 500 milliliters with distilled water. Proceed as outlined in (*c*) of this subdivision, except use the following formula:

$$\frac{\text{Sample absorbance} \; -\text{Sample blank absorbance}}{\text{Sample weight in milligrams}} \times \frac{1{,}000}{\text{Standard factor K}} = \text{Micrograms erythromycin base activity per milligram.}$$

(2) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, except administer orally 1.0 milliliter of a suspension of the drug containing 30 milligrams per milliliter in 10-percent acacia solution.

(3) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(4) *pH.* Using a saturated aqueous solution (100 milligrams of erythromycin base per milliliter) proceed as directed in § 141a.5(b) of this chapter.

(5) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

(6) *Identity test.* The infrared absorption, in the spectrum from 2 microns to 12 microns, of a 5 percent solution of the sample in chloroform compares qualitatively to that of the erythromycin working standard, similarly treated.

§ 148e.2 Erythromycin ethylcarbonate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin ethylcarbonate is a white, crystalline ester of erythromycin obtained by the reaction of a kind of erythromycin and chloroethylcarbonate. It is slightly soluble in water, freely soluble in alcohol, methyl alcohol, acetone, ether, and chloroform. It is so purified and dried that:

(i) It contains not less than 775 micrograms of erythromycin base per milligram, calculated on an anhydrous basis.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 8 percent.

(iv) Its pH is not less than 6.3 and not more than 8.0.

(v) It gives a positive identity test for erythromycin ethylcarbonate.

(2) *Labeling.* It shall be labeled in accordance with the requirements prescribed by § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, pH, identity, and crystallinity.

(ii) Samples required: 10 containers, each containing not less than 500 milligrams.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures:

(i) *Microbiological plate assay.* Proceed as directed in § 148e.1(b)(1)(i), except to prepare the sample, wash an accurately weighed amount of the sample (approximately 50 milligrams) into a 100-milliliter volumetric flask, using approximately 20 milliliters of absolute methyl alcohol. Immediately dilute to volume with sterile distilled water. Place this solution in a 60° C. water bath for 3 hours or allow it to remain at room temperature for 16 hours to 18 hours to accomplish hydrolysis. Adjust the volume to 100 milliliters with potassium phosphate buffer, pH 8.0, and mix well. Further dilute an aliquot to the reference point of the assay with 0.1*M* potassium phosphate buffer, pH 8.0.

(ii) *Spectrophotometric assay.* Proceed as directed in § 148e.1(b)(1)(ii), except § 148e.1(b)(1)(ii)(*d*). To prepare the sample, transfer approximately 100 milligrams of the accurately weighed sample to a 500-milliliter volumetric flask. Dissolve in 50 milliliters of methyl alcohol, dilute to 500 milliliters with distilled water, and mix well. Allow the solution to remain at room temperature for 30 minutes to 90 minutes and proceed as directed in § 148e.1(b)(1)(ii)(*c*), using the following formula to calculate the potency of the sample:

$$\frac{\text{Sample absorbance} - \text{Sample blank absorbance}}{\text{Milligrams of sample}} \times \frac{1{,}000}{\text{Standard factor K}} = \text{Micrograms of erythromycin base activity per milligram.}$$

(2) *Toxicity.* Proceed as directed in § 141d.305(b) of this chapter, except administer orally 0.5 milliliter of a solution containing 100 milligrams (potency) per milliliter in a 10 percent acacia solution.

(3) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a concentration of 200 milligrams per milliliter.

(5) *Identity tests.* Proceed as directed in § 148e.1(b)(6), except that an authentic erythromycin ethylcarbonate is used as the sample of comparison.

(6) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

§ 148e.3 Erythromycin glucoheptonate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin glucoheptonate is the white, crystalline powder of the glucoheptonic acid salt of erythromycin or a mixture of two or more such salts. It is freely soluble in water, alcohol, and methyl alcohol. It is slightly soluble in acetone and chloroform, but is practically insoluble in ether. It is so purified and dried that:

(i) It contains not less than 600 micrograms of erythromycin base per milligram, calculated on an anhydrous basis.

(ii) It is sterile.

(iii) It is nontoxic.

(iv) It is nonpyrogenic.

(v) It contains no histamine nor histamine-like substances.

(vi) Its moisture content is not more than 5.0 percent.

(vii) Its pH in an aqueous solution containing 25 milligrams per milliliter is not less than 6.0 nor more than 8.0.

(viii) It gives a positive identity test for erythromycin glucoheptonate.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, sterility, toxicity, pyrogens, histamine, moisture, pH, identity, and crystallinity.

(ii) Samples required:

(*a*) For all tests except sterility: 10 packages, each containing not less than 500 milligrams.

(*b*) For sterility testing: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $10.00 for each container in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use any of the following procedures:

(i) *Microbiological assay.* Proceed as directed in § 148e.1(b)(1)(i).

(ii) *Spectrophotometric assay.* Transfer approximately 100 milligrams of erythromycin glucoheptonate, accurately weighed, to a 500-mililiter volumetric flask. Dissolve with distilled water, add 50 milliliters of methyl alcohol, and dilute to 500 milliliters with distilled water. Mix well, and proceed as directed in § 148e.1(b)(1)(ii)(*c*), using the following calculation:

$$\frac{\text{Sample absorbance} - \text{Sample blank absorbance}}{\text{Sample weight in milligrams}} \times \frac{1{,}000}{\text{Standard factor K}} = \text{Micrograms of erythromycin base per milliliter.}$$

(2) *Sterility.* Use 500 milligrams from each container tested, and proceed as directed in § 141a.2 of this chapter, except that neither the penicillinase nor the control tube is used in the test for bacteria.

(3) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using a test dose of 1 milliliter per kilogram of a sterile, pyrogen-free U.S.P. saline test solution containing 50 milligrams of erythromycin base per milliliter.

(4) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using a test dose of 0.5 milliliter of a sterile U.S.P. saline test solution containing 2 milligrams of erythromycin base per milliliter.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, using a test dose of 1 milliliter per kilogram of a sterile saline test solution containing 3 milligrams of erythromycin activity per milliliter.

(6) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a concentration of 25 milligrams per milliliter.

(8) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

(9) *Identity.* Proceed as directed in § 148e.1(b)(6), except compare the infrared absorption spectrum with that of an authentic sample of erythromycin glucoheptonate.

§ 148e.4 Erythromycin lactobionate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin lactobionate is the white or slightly yellow, crystalline lactobionate salt of erythromycin. It is freely soluble in water, alcohol, and methyl alcohol. It is slightly soluble in acetone and chloroform, and is practically insoluble in ether. It is so purified and dried that:

(i) It contains not less than 600 micrograms of erythromycin base per milligram, calculated on an anhydrous basis.

(ii) It is sterile.

(iii) It is nonpyrogenic.

(iv) It is nontoxic.

(v) It contains no histamine nor histamine-like substances.

(vi) Its moisture content is not more than 5 percent.

(vii) Its pH is not less than 6.5 nor more than 7.5.

(viii) It gives a positive identity test for erythromycin lactobionate.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, sterility, toxicity, pyrogens, histamine, moisture, pH, crystallinity, and identity.

(ii) Samples required:

(*a*) For all tests except sterility: 10 packages, each containing approximately 500 milligrams.

(*b*) For sterility testing: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $10.00 for each container submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148e.1(b)(1).

(2) *Sterility.* Using 500 milligrams from each container tested, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using as a test dose 1.0 milliliter per kilogram of a sterile, pyrogen-free U.S.P. saline test solution containing 50 milligrams of erythromycin base.

(4) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using as a test dose 0.5 milliliter of a sterile U.S.P. saline test solution containing 3 milligrams of erythromycin base per milliliter.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, administering a test dose of 1 milliliter per kilogram of a sterile distilled water solution containing 3 milligrams per milliliter.

(6) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a concentration of 50 milligrams of erythromycin base per milliliter.

(8) *Identity.* The infrared absorption in the spectrum from 2 microns to

12 microns of a liquid petrolatum dispersion compares qualitatively to that of a similarly prepared authentic erythromycin lactobionate sample.

(9) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

§ 148e.5 Erythromycin estolate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin estolate is the lauryl sulfate salt of the propionyl ester of a kind of erythromycin or a mixture of two or more such salts. It occurs as the white crystalline powder. It is soluble in alcohol, methyl alcohol, acetone, and chloroform, but is practically insoluble in water. It is so purified and dried that:

(i) It contains not less than 600 micrograms of erythromycin base activity per milligram, calculated on an anhydrous basis.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 5 percent.

(iv) Its pH is not less than 4.5 nor more than 7.0.

(v) It gives positive identity tests for erythromycin estolate.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, pH, identity, and crystallinity.

(ii) Samples of the batch: A minimum of 10 containers, each containing not less than 500 milligrams.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subdivision (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures:

(i) *Microbiological plate assay*—Proceed as directed in § 148e.2(b)(1)(i), using 1*M* potassium phosphate buffer, pH 8, in lieu of distilled water to prepare the sample.

(ii) *Spectrophotometric assay*—(*a*) *Reagents*—(*1*) Alkali reagent: Dissolve 42 grams of tribasic sodium phosphate, dodecahydrate ($Na_3PO_4 \cdot 12H_2O$) in 125 milliliters of 0.5*N* sodium hydroxide, and add 100 milliliters of distilled water. Heat on a steam bath until solution results. Cool and dilute to 250 milliliters with distilled water. Filter before use.

(*2*) 0.5*N* sulfuric acid.

(*3*) 0.5*N* sodium hydroxide.

(*4*) *Methyl alcohol* (*anhydrous*), reagent grade.

(*5*) 0.5 percent potassium phosphate buffer (pH 7.0): Dissolve 13.55 grams of KH_2PO_4 and 27.20 grams of K_2HPO_4 in 5 liters of distilled water. Dilute to 9 liters, and mix well.

(*6*) Erythromycin working standard buffered solution: Dry approximately 70 milligrams of erythromycin working standard for 3 hours at 60° C. and a pressure of 5 millimeters or less. Determine the dry weight and transfer to a 500-milliliter volumetric flask. Dissolve in 200 milliliters of methyl alcohol, and dilute to 500 milliliters with 0.5 percent potassium phosphate buffer, pH 7.0. This solution may be used for 1 week if it is kept in a refrigerator.

(*b*) *Apparatus.* A suitable spectrophotometer equipped with a hydrogen lamp source of ultraviolet radiation, and matched, rectangular 1-centimeter silica cells.

(*c*) *Standard erythromycin factor.* Transfer a 10-milliliter aliquot of the erythromycin reference standard buffered solution to each of four 25-milliliter volumetric flasks. Pipette 1.0 milliliter of 0.5*N* sulfuric acid into two of the flasks, mix well, and set aside at room temperature for 60 minutes. Pipette 2.0 milliliters of alkali reagent into the other two flasks, mix well, and heat in a 60° C. constant temperature water bath for 15 minutes. After heating, transfer the flasks to an ice water bath and cool rapidly to room temperature. Dilute to 25 milliliters with distilled water and mix well. Determine the absorbance of these solutions at 236 millimicrons, using distilled water in the reference cell. After the two acid-treated solutions have reacted for 60 minutes, pipette 1.0 milliliter of 0.5*N* sodium hydroxide into each flask. Pipette 2 milliliters of the alkali reagent into the flasks and heat in a 60° C. constant-temperature water bath for 15 minutes. Cool rapidly to room temperature and dilute to 25 milliliters with distilled water. Determine the absorbance of these standard blank solutions at 236 millimicrons, using distilled water in the reference cell.

Calculation:

$$\frac{\text{Standard absorbance} - \text{Standard blank absorbance}}{\text{Milligrams of standard}} \times \frac{1{,}000}{\text{Standard potency}} = \text{Standard factor K.}$$

(*d*) *Sample preparation.* Transfer approximately 100 milligrams of sample, accurately weighed, to a 500-milliliter volumetric flask. Dissolve in 200 milliliters of methyl alcohol, and immediately dilute to 500 milliliters with 0.5 percent potassium phosphate buffer (pH 7.0). Mix well. Proceed as outlined in subsection (*c*) of this subdivision, except use the following formula:

$$\frac{\begin{array}{c}\text{Sample absorbance}\\ -\text{Sample blank absorbance}\end{array}}{\text{Sample weight in milligrams}} \times \frac{1{,}000}{\text{Standard factor K}} = \begin{array}{c}\text{Micrograms erythromycin}\\ \text{base per milligram.}\end{array}$$

(2) *Toxicity.* Proceed as directed in § 141d.305(b) of this chapter, except to administer orally 0.5 milliliter of a suspension containing 20 milligrams of erythromycin base per mililiter in a 5 percent acacia solution.

(3) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, except prepare the sample in the following manner: Dissolve 1 gram in 5 milliliters of absolute ethyl alcohol and then add 19 milliliters of distilled water.

(5) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

(6) *Identity test.* Proceed as directed in § 148e.1(b)(6), except compare the infrared absorption spectrum with that of an authentic sample of erythromycin estolate.

§ 148e.6 Erythromycin stearate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin stearate is the odorless white or slightly yellow crystals or powder of the stearic acid salt of erythromycin. It is practically insoluble in water but is soluble in alcohol, methyl alcohol, chloroform, and ether. It is so purified and dried that:

(i) It contains the equivalent of not less than 500 micrograms of erythromycin base per milligram, calculated on an anhydrous basis.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 5.0 percent.

(iv) Its pH is not less than 7.0 nor more than 10.0.

(v) It gives positive identity tests for erythromycin stearate.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, pH, and identity.

(ii) Samples required: A minimum of 10 containers, each consisting of 500 milligrams.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148e.1 (b)(1)(i), except prepare the sample in the following manner: Dissolve 50 milligrams, accurately weighed, in sufficient absolute methyl alcohol to give a concentration of 1 milligram per milliliter.

(2) *Toxicity.* Proceed as directed in § 141d.305(b) of this chapter, except administer orally 0.5 milliliter of a suspension containing 80 milligrams (potency) per milliliter, prepared by grinding the sample in sterile distilled water, using 1 drop of polysorbate 80 per 3 grams of sample.

(3) *Moisture content.* Proceed as directed in § 141a.26(e) of this chapter.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a 1 percent slurry of erythromycin stearate in water.

(5) *Identity.* Proceed as directed in § 148e.1(b)(6), except compare qualitatively the infrared absorption spectrum with that of an authentic sample of erythromycin stearate.

(6) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

§ 148e.7 Erythromycin ethylsuccinate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin ethylsuccinate is the white, odorless, crystalline ethylsuccinate salt of erythromycin. It is so purified and dried that:

(i) It contains the equivalent of not less than 765 micrograms of erythromycin base per milligram, calculated on an anhydrous basis.

(ii) It is sterile.

(iii) It is nontoxic.

(iv) Its moisture content is not more than 2.0 percent.

(v) Its pH is not less than 4.5 and not more than 7.0.

(vi) It gives a positive identity test for erythromycin ethylsuccinate.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for Certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) results of tests and assays on the batch for potency, sterility, toxicity, moisture, pH, identity, and crystallinity.

(ii) Samples required:

(*a*) For all tests except sterility: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) For sterility testing: 10 immediate containers.

(4) *Fees.* $4.00 for each package submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all immediate containers submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148e.1(b)(1)(i), except prepare the sample in the following manner: Dissolve approximately 50 milligrams, accurately weighed, in sufficient absolute methyl alcohol to give a concentration of 1 milligram of erythromycin base per milliliter. Further dilute in 0.1*M* potassium phosphate buffer, pH 8.0.

(2) *Sterility.* Using approximately 500 milligrams from each container tested, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Toxicity.* Proceed as directed in § 141d.305(b) of this chapter, except administer orally 0.5 milliliter of a sterile suspension prepared by grinding the sample with sterile distilled water and 1 drop of polysorbate 80 per 3 grams of sample.

(4) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(5) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a 1.0 percent suspension in water.

(6) *Identity.* Using a suitable spectrophotometer with 0.1-millimeter cells, scan the infrared absorption spectrum between 2 microns and 12.5 microns of a 5 percent chloroform solution of erythromycin ethylsuccinate. The absorption spectrum compares qualitatively to that of an authentic sample of erythromycin ethylsuccinate.

(6) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

§ 148e.8 Erythromycin sulfate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin sulfate is the sulfate salt of erythromycin. It is an odorless, practically white, crystalline powder. It is so purified and dried that:

(i) It contains the equivalent of not less than 840 milligrams of erythromycin base per milligram, calculated on an anhydrous basis.

(ii) Its moisture content is not more than 7.0 percent.

(iii) Its pH in a solution containing 10 milligrams per milliliter is not less than 4.5 and not more than 6.5.

(iv) It gives a positive identity test for erythromycin sulfate.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, moisture, pH, and identity.

(ii) Samples required: 10 containers, each consisting of 500 milligrams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148e.1(b)(1)(i), except prepare the sample in the following manner: Dissolve approximately 50 milligrams, accurately weighed, in sufficient absolute methyl alcohol to give a concentration of 1.0 milligram per milliliter.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *pH.* Proceed as directed in §141a.5(b) of this chapter, using a concentration of 10 milligrams per milliliter.

(4) *Identity.* Use the following procedures:

(i) *Erythromycin.* Proceed as directed in § 148e.1(b) (1), (6). The infrared absorbtion spectrum compares qualitatively to that of a similarly prepared authentic sample of erythromycin sulfate.

§ 148e.9 Erythromycin ethylsuccinate dental powder.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin ethylsuccinate dental powder is a dry mixture of crystalline erythromycin ethylsuccinate, with or without sulfanilamide, and with or without one or more suitable and harmless diluents and flavorings. Each vial contains the equivalent of not less than 10 milligrams of erythromycin base. It is sterile. Its moisture content is not more than 1.0 percent. The crystalline erythromycin ethylsuccinate used conforms to the requirements of § 148e.7(a)(1). Each other ingredient used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin ethylsuccinate used in making the batch for potency, toxicity, moisture, pH, identity, and crystallinity.

(*b*) The batch for potency, sterility, and moisture.

(ii) Samples required:

(*a*) The erythromycin ethylsuccinate used in making the batch: 10 containers, each consisting of 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: A minimum of 30 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One immediate container of each containing 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii)(*a*) and (*c*) of this paragraph; $0.75 for each container submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $10.00 for all containers submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148e.1(b)(1), using an appropriate number of immediate containers (usually 10) to prepare the sample for assay. Its potency is satisfactory if it contains the equivalent of not less than 90 percent and not more than 115 percent of the number of milligrams of erythromycin activity that it is represented to contain.

(2) *Sterility.* Use the entire contents of each container tested, and proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

§ 148e.10 Erythromycin for oral suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin for oral suspension is a dry mixture of erythromycin, with or without suitable and harmless buffer substances, suspending and dispersing agents, diluents, colorings, flavorings, and preservatives. It may contain one or more suitable sulfonamides. The erythromycin content is not less than 40 milligrams of erythromycin base per milliliter of the reconstituted suspension. The erythromycin used conforms to the requirements of § 148e.1(a)(1). Its moisture content is not more than 2 percent. Each other substance used, if its name is recognized in the U.S.P. or N.F. conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin used in making the batch for potency, toxicity, moisture, pH, crystallinity, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The erythromycin used in making the batch: Six containers, each consisting of 500 milligrams.

(*b*) The batch: A minimum of five immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch, one container each consisting of 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use any of the following procedures:

(i) *Microbiological assay.* Proceed as directed in § 148e.1(b)(1) except prepare the sample in the following manner: Reconstitute the drug as directed in the labeling, and dilute an accurately measured aliquot (usually 1.0 milliliter) of the suspension in a 100-milliliter volumetric flask, using a volume-to-volume mixture of 40 parts reagent grade methyl alcohol and 60 parts of 0.1*M* potassium phosphate buffer, pH 8.0.

(ii) *Spectrophotometric assay.* Reconstitute the drug as directed in the labeling, and shake until a uniform suspension is obtained. Proceed as directed in § 148e.1(b)(1)(ii), except prepare the sample for assay as follows: If the solution does not contain a sulfonamide, transfer 2.0 milliliters of the well-shaken suspension to a 1-liter volumetric flask. Add 20 milliliters of methyl alcohol to the flask with swirling to dissolve the erythromycin in the sample. Bring to volume with distilled water, and mix well. If the sample contains a sulfonamide, transfer 2 milliliters of reconstituted suspension to a 125-milliliter separatory funnel. Add 40 milliliters of chloroform and 10 milliliters of water and shake for 1 minute. Collect chloroform extractive in another separatory funnel. Repeat extractions with four 25-milliliter portions of chloroform. Shake the combined chloroform extractives with 10 milliliters of water, and filter the chloroform through a layer of anhydrous sodium sulfate into a 250-milliliter beaker. During the filtration, evaporate the chloroform filtrate in a current of air while warming on a steam bath. Shake the aqueous portion with two 10-milliliter portions of chloroform and wash funnel with chloroform. Evaporate to dryness and dissolve residue in 10 milliliters of methyl alcohol. Transfer the solution to a 1,000-milliliter volumetric flask, and wash beaker with 10-milliliter portions of methyl alcohol. Adjust the volume to 1,000 milliliters with distilled water. Transfer four 10-milliliter aliquots of the final solution to each of four 25-milliliter volumetric flasks. To two flasks add 1 milliliter 0.05*N* H_2SO_4 and set aside at room temperature for 1 hour. To the other two flasks, add 2 milliliters of alkali reagent described in § 148e.1(b)(1)(ii)(*a*)(*1*), and heat in a 60° C. constant temperature bath for 15 minutes. Place the flasks in an ice bath and cool rapidly to room temperature. Dilute to mark with distilled water and determine the absorbance at 236 millimicrons against a sample of distilled water. After the two acid-treated samples have reacted for 1 hour, add 1 milliliter of 0.05*N* NaOH to each flask, add 2 milliliters of alkali reagent described in § 148e.1(b)(1)(ii)(*a*)(*1*), and heat in a 60° C. constant temperature bath for 15 minutes. Place the flasks in an ice bath and cool rapidly to room temperature. Dilute to volume with distilled water and determine the absorbance at 236 millimicrons against a sample of distilled water. Use these absorbance readings as the sample blank. Calculation:

$$\frac{\text{Sample absorbance} - \text{Sample blank absorbance}}{\text{Standard factor K}} = \text{Milligrams erythromycin base per milliliters of reconstituted suspension.}$$

The erythromycin content is satisfactory only if it is not less than 90 percent nor more than 115 percent of label claim.

(2) *Moisture.* Proceed as directed in § 146a.26(e) of this chapter, using the dry powder.

§ 148e.11 Erythromycin ethylcarbonate for oral suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin ethylcarbonate for oral suspension is a dry mixture of erythromycin ethylcarbonate, with or without suitable and harmless buffer substances, suspending and dispersing agents, diluents, colorings, flavorings, and preservatives. It may contain one or more suitable sulfonamides. The erythromycin ethylcarbonate content is not less than 40 milligrams of erythromycin base per milliliter of the reconstituted suspension. Its moisture content is not more than 2.0 percent. When reconstituted as directed in the labeling, its pH is not less than 6.5 and not more than 8.0. The erythromycin ethylcarbonate used conforms to the requirements of § 148e.2(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) Erythromycin ethylcarbonate used in making the batch for potency, toxicity, moisture, pH, crystallinity, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) Erythromycin ethylcarbonate used in making the batch: 10 containers, each containing 500 milligrams.

(*b*) The batch: A minimum of 6 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One container consisting of 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use any of the following procedures:

(i) *Microbiological assay.* Proceed as directed in § 148e.2(b)(1)(i), except prepare the sample in the following manner: Reconstitute the suspension as directed in the labeling. Place 1 milliliter to 5 milliliters of an accurately measured volume of the oral suspension in a 100-milliliter volumetric flask and dissolve in 40 milliliters of reagent grade methyl alcohol. Bring to volume with 0.1*M* potassium phosphate buffer, pH 8.0, and mix well. Hydrolyze either in a 60° C. water bath for 3 hours or keep at room temperature for 16–18 hours. Make subsequent dilutions in 0.1*M* potassium phosphate buffer, pH 8.0.

(ii) *Spectrophotometric assay.* Proceed as directed in § 148e.1(b)(1)(ii), except prepare the sample in the following manner: Reconstitute as directed in the labeling and transfer 5 milliliters of the well-shaken suspension (for the 5-milliliter bottle, pour the entire suspension contents) into a 1,000-milliliter volumetric flask and add 400 milliliters of a 50 percent methyl alcohol-50 percent distilled water solution. Shake until the suspension dissolves, dilute to 1,000 milliliters with distilled water, and mix well. Allow the solution to stand at room temperature for 0.5 hour to 1.5 hours. Further dilute 50 milliliters to 100 milliliters with 10 percent methyl alcohol, and again mix well. Proceed as directed in § 148e.1(b)(1)(ii)(*c*), using the following calculations:

(*a*) Suspension containing more than 5 milliliters per bottle:

$$\frac{(\text{Sample absorbance} - \text{Sample blank absorbance})}{1.25 \times \text{Factor K}} = \text{Milligrams of erythromycin base per milliliter.}$$

(*b*) Samples containing 5 milliliters or less per bottle:

$$\frac{\text{Sample reading} - \text{Sample blank}}{0.25 \times \text{Factor K}} = \text{Milligrams of erythromycin base per bottle.}$$

The erythromycin ethylcarbonate content is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the suspension prepared as directed in its labeling.

§ 148e.12 Erythromycin estolate for oral suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin estolate for oral suspension is a dry mixture of erythromycin estolate, with or without suitable and harmless buffer substances, suspending and dispersing agents, diluents, colorings, flavorings, and preservatives. It may contain one or more suitable sulfonamides. The erythromycin estolate content is not less than 25 milligrams of erythromycin base per milliliter of the reconstituted suspension. When reconstituted as directed in its labelings, its pH is not less than 4.5 and not more than 7.0. Its moisture content is not more than 2.0 percent. The erythromycin estolate used conforms to § 148e.5(a) (1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin estolate used in making the batch for potency, toxicity, moisture, pH, crystallinity, and identity.

(*b*) The batch: Potency, moisture, and pH.

(ii) Samples required:

(*a*) The erythromycin estolate used in making the batch: 10 immediate containers, each consisting of 500 milligrams.

(*b*) The batch: A minimum of 6 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One container of each, consisting of 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use any of the following procedures.

(i) *Microbiological assay.* Proceed as directed in § 148e.11(b)(1)(i).

(ii) *Spectrophotometric assay*—(*a*) *Erythromycin estolate without sulfonamides.* Reconstitute as directed in the labeling, and transfer 5 milliliters of the well-shaken suspension (for the 5-milliliter bottle, pour the entire suspension contents) into a 1,000-milliliter volumetric flask. Add 800 milliliters of a 50 percent mixture of methyl alcohol and the potassium phosphate buffer solution described in § 148e.5(b)(1)(ii)(*a*), and shake to dissolve the erythromycin estolate. Dilute to 1 liter with the methyl alcohol-phosphate buffer solution, and mix well. Hydrolyze the erythromycin estolate in the solution to erythromycin either by keeping it at room temperature overnight (approximately 20 hours), or by keeping the sample in a 60° C. constant-temperature bath for 3 hours. Transfer a 50-milliliter aliquot of the erythromycin solution to a 100-milliliter volumetric flask. Dilute to 100 milliliters with the methyl alcohol-phosphate buffer solution, and mix well. Proceed as directed in § 148e.5(b)(ii)(*c*), using the following calculation:

$$\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{\text{Standard factor K}}\times\frac{4}{5}=\text{Milligrams of erythromycin base per milliliter of suspension.}$$

The standard factor K is derived as described in § 148e.5(b)(1)(ii)(*c*).

(*b*) *Erythromycin estolate with sulfonamides.* Reconstitute as directed in the labeling, and transfer 2 milliliters of the well-shaken suspension to a 125-milliliter separatory funnel. Add 10 milliliters of water and 40 milliliters of chloroform and then shake for 1 minute. Add 5 milliliters of 10 percent sodium hydroxide solution and shake for 1 minute. Allow the suspension to separate into two layers. Collect the chloroform extractive in a 250-milliliter separatory funnel. Extract the alkaline suspension four more times with 25-milliliter portions of chloroform. Combine the chloroform extractives in the 250-milliliter separatory funnel, and wash the combined extractives with 10 milliliters of water. Filter the washed chloroform through a layer of anhydrous sodium sulfate into a 250-milliliter beaker. Extract the 10 milliliters of wash water with two 10-milliliter portions of chloroform, and add this to the chloroform extractives in the beaker, through the sodium sulfate. Wash the sodium sulfate with chloroform, and collect the washings in the beaker. Evaporate the chloroform to dryness on a steam bath with the aid of a current of air. Dissolve the residue in 10 milliliters of methyl alcohol. Transfer the solution quantitatively to a 500-milliliter volumetric flask. Wash the beaker with four 10-milliliter portions of methyl alcohol and transfer the washes quantitatively to the flask. Add 150 milliliters of methyl alcohol, and mix well. Dilute to 500 milliliters with 0.5 percent potassium phosphate buffer solution (pH 7.0) and mix well. Hydrolyze the erythromycin estolate in the solution to erythromycin by keeping it at room temperature overnight (approximately 20 hours) or by keeping the sample in a 60° C. constant-temperature bath for 180 minutes.

Calculation:

$$\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{\text{Standard factor K}\times 2.0}=\text{Milligrams of erythromycin base per milliliter of suspension.}$$

The standard factor K is derived as described in § 148e.5(b)(1)(ii)(c). The erythromycin estolate content is satisfactory if it is not less than 90 percent nor more than 115 percent of the label claim.

(2) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter, using the dry powder.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the drug reconstituted as directed in its labeling.

§ 148e.13 Erythromycin ethylsuccinate oral suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin ethylsuccinate oral suspension is erythromycin ethylsuccinate, with or without suitable and harmless buffer substances, suspending and dispersing agents, diluents, colorings, and flavorings, and with or without one or more suitable preservatives. It contains the equivalent of not less than 40 milligrams of erythromycin base per milliliter of the reconstituted suspension. Its moisture content is not more than 5.0 percent. The crystalline erythromycin ethylsuccinate used conforms to the requirements of § 148e.7(a)(1) (i), (iii), (iv), (v), and (vi). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin ethylsuccinate used in making the batch for potency, toxicity, moisture, identity, and crystallinity.

(*b*) The batch for potency and moisture:

(ii) Samples required:

(*a*) The erythromycin ethylsuccinate used in making the batch: 10 containers, each consisting of 500 milligrams.

(*b*) The batch: A minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One container of each, consisting of 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148e.11(b)(1)(i). Its potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of erythromycin base that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.8(b) of this chapter.

§ 148e.14 Erythromycin ointment.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin ointment is erythromycin, with or without one or more suitable and harmless preservatives and stabilizing agents, and cortisone or a suitable derivative of cortisone, in a suitable and harmless ointment base. Each gram of ointment contains not less than 10 milligrams of erythromycin base, except if it is for ophthalmic use each contains not less than 5 milligrams of erythromycin base. The moisture content is not more than 1.0 percent. The erythromycin used conforms to the standards prescribed by § 148e.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms with the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin used in making the batch for potency, pH, moisture, crystallinity, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The erythromycin used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*b*) The batch: A minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each, consisting of not less than 5 grams.

(4) *Fees.* $4.00 for each immediate container or package submitted in accordance with subparagraph (3)(ii) of this paragraph:

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Microbiological assay.* Proceed as directed in § 148e.1(b)(1)(i), except prepare the sample by either of the following procedures:

(*a*) Place 1 gram of the ointment, accurately weighed, in a 1-liter volumetric flask, add 50 milliliters of peroxide-free ether, and shake until dissolved. Add 200 milliliters of absolute methyl alcohol, and mix thoroughly. Fill to volume and further dilute to the reference point with 0.1*M* potassium phosphate buffer, pH 8.0.

(*b*) Place 1 gram of the ointment, accurately weighed, in a high-speed, glass blending jar with 1 milliliter of polysorbate 80 and 100 milliliters of absolute methyl alcohol and blend for 2 minutes to 3 minutes. Add 399 milliliters of 0.1*M* potassium phosphate buffer, pH 8.0, and blend again for 2 minutes to 3 minutes. Further dilute to the reference point in 0.1*M* potassium phosphate buffer, pH 8.0.

(ii) *Spectrophotometric assay*—(*a*) *Standard procedure.* Dissolve 50 milligrams of erythromycin working standard in 5 milliliters of methyl alcohol and dilute to 50 milliliters with distilled water in a suitable volumetric flask. Transfer 25 milliliters to a 125-milliliter volumetric flask. Add 50 milliliters of petroleum ether, shake the mixture for 1 minute, allow to separate, then draw the aqueous layer through a pledget of cotton into a 200-milliliter volumetric flask. Repeat the extraction of the petroleum ether with two 40-milliliter portions of 80 percent aqueous methyl alcohol, withdrawing each extractive through the cotton into the volumetric flask. Add sufficient anhydrous methyl alcohol to the flask to make a volume of 200 milliliters, and mix well. To each of four 25-milliliter volumetric flasks, add a 5-milliliter aliquot of this solution, plus 5 milliliters of 60 percent aqueous methyl alcohol. To two flasks (blanks) add 1 milliliter of 0.05*N* sulfuric acid, mix well, and set aside at room temperature for 1 hour. At the end of this time, add 1 milliliter of 0.05*N* sodium hydroxide to each of the two flasks, and mix well. To the two untreated flasks (samples) add 2 milliliters of distilled water. Then to all flasks add 2 milliliters of 0.05*N* sodium hydroxide and heat in a 60° C. constant-temperature water bath for 15 minutes. Place the flasks in an ice bath, and cool rapidly to room temperature. Bring the volume in each flask to 25 milliliters with 60 percent aqueous methyl alcohol solution, mix thoroughly, and determine the absorbance at 236 millimicrons, using distilled water from the same source as used in the assay, in the reference cell.

$$\frac{\text{Standard absorbance} - \text{Standard blank absorbance}}{\text{Milligrams of standard}} \times \frac{1{,}000}{\text{Potency of the standard in micrograms per milligram}} = \text{Factor K.}$$

(*b*) *Sample procedure.* Determine two separate samples. Weigh accurately about 2 grams (4 grams, if it is the ophthalmic ointment) of the ointment, and carefully transfer the sample to a 125-milliliter separatory funnel. Add 50 milliliters of petroleum ether and shake to dissolve the ointment base. Extract the erythromycin with three 50-milliliter portions of 80 percent aqueous methyl alcohol. Filter each extractive through a pledget of cotton (previously washed with a few milliliters of the methyl alcohol solution) into a 200-milliliter volumetric flask, add sufficient 80 percent methyl alcohol to make exactly 200 milliliters, and mix well. To each of four 25-milliliter volumetric flasks add a 5-milliliter aliquot of this solution, plus 5 milliliters of 60 percent aqueous methyl alcohol. To two flasks (blanks) add 1 milliliter of 0.05*N* sulfuric acid, mix well, and set aside at room temperature for 1 hour. At the end of this time add 1 milliliter of 0.05*N* sodium hydroxide to each of the two flasks, and mix well. To the two untreated flasks (samples) add 2 milliliters of distilled water. Then to all flasks add 2 milliliters of 0.05*N* sodium hydroxide, and heat in a 60° C. constant temperature bath for 15 minutes. Place the flasks in an ice bath and cool rapidly to room temperature. Bring the volume in each flask to 25 milliliters with 60 percent methyl alcohol, mix thoroughly, and determine the absorbance at 236 millimicrons, using distilled water from the same source as used in the assay in the reference cell.

$$\frac{\text{Sample absorbance} - \text{Sample blank absorbance}}{\text{Weight of ointment in grams} \times \text{Factor K}} = \text{Milligrams of erythromycin base per gram of ointment.}$$

Its potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.8(b) of this chapter.

§ 148e.15 Erythromycin-neomycin sulfate ointment.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin-neomycin sulfate ointment is erythromycin and neomycin sulfate in a suitable and harmless ointment base. Each gram contains not less than 5 milligrams of erythromycin and the equivalent of not less than 3.5 milligrams of neomycin base. The moisture content is not more than 1 percent. The erythromycin used conforms to the standards prescribed therefor by § 148e.1(a)(1). The neomycin sulfate used conforms to the standards prescribed in § 148i.3(a)(1)(i), (vi), and (vii) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin used in making the batch for potency, pH, moisture, crystallinity, and identity.

(*b*) The neomycin sulfate used in making the batch for potency, pH, moisture, and identity.

(*c*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The erythromycin used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*b*) The neomycin sulfate used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*c*) The batch: A minimum of 6 immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing not less than 5 grams.

(4) *Fees.* $4.00 for each package submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Erythromycin.* Proceed as directed in § 148e.14(b)(1). Its erythromycin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Neomycin sulfate.* Proceed as directed in § 148i.3(b)(1) of this chapter. Its neomycin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.8(b) of this chapter.

§ 148e.16 Erythromycin-polymyxin B sulfate ointment.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin-polymyxin B sulfate ointment is erythromycin and polymyxin B sulfate in a suitable and harmless ointment base. Each gram shall contain not less than 5 milligrams of erythromycin base and not less than 5,000 units of polymyxin B sulfate. The moisture content is not more than 1 percent. The crystalline erythromycin used conforms to the standards prescribed therefor by § 148e.1 (a)(1). The polymyxin B sulfate used conforms to the standards prescribed by § 148p.3(a)(1) (i), (vi), (vii), and (viii) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin used in making the batch for potency, pH, moisture, crystallinity, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, pH, moisture, and identity.

(*c*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The erythromycin used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*c*) The batch: Six immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package, each containing 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Erythromycin.* Proceed as directed in § 148e.14(b)(1). The erythromycin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Polymyxin B sulfate.* Proceed as directed in § 148p.3(b)(1) of this chapter. The polymyxin B sulfate content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.8(b) of this chapter.

§ 148e.17 Erythromycin estolate capsules.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin estolate capsules are capsules containing erythromycin estolate, with or without suitable and harmless buffer substances and diluents, enclosed in a gelatin capsule. The erythromycin estolate content of each capsule is equivalent to not less than 125 milligrams of erythromycin base. The moisture content is not more than 5 percent. The erythromycin estolate used conforms to the standards prescribed therefor by § 148e.5(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.3 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin estolate used in making the batch for potency, toxicity, pH, moisture, crystallinity, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The erythromycin estolate used in making the batch: Six packages, each containing not less than 500 milligrams.

(*b*) The batch: A minimum of 30 capsules.

(*c*) In case of an initial request for certification, each other ingredient used: One package, each containing not less than 5 grams.

(4) *Fees.* $4.00 for each package submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph; $0.75 for each capsule submitted in accordance with subparagraph (3)(ii) (*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Microbiological assay.* Proceed as directed in § 148e.2(b)(1)(i), except prepare the sample in the following manner: Using 200 milliliters of reagent-grade methyl alcohol and 300 milliliters of 1*M* potassium phosphate buffer, pH 8.0, blend a representative number of capsules in a high-speed glass blender for 2 to 3 minutes.

(ii) *Spectrophotometric assay.* Transfer four 250-milligram capsules to a 1-liter volumetric flask, or transfer eight 125-milligram capsules to a 1-liter volumetric flask (if necessary, use methyl alcohol to aid in the transfer). Add enough methyl alcohol to make 400 milliliters total. Mix well, and allow to stand for 5 minutes to allow soluble matter to go into solution; then add 0.5 percent potassium phosphate buffer, pH 7.0, mix well, and let stand for 5 minutes. Dilute to 1 liter with 0.5 percent potassium phosphate buffer, pH 7.0, and mix well. Hydrolyze the erythromycin estolate to erythromycin either by keeping it at room temperature overnight (approximately 20 hours) or by keeping the sample in a 60°C. constant-temperature bath for 180 minutes. Filter and discard the first 20 milliliters of the filtrate. Transfer 10 milliliters of the filtrate to a 100-milliliter volumetric flask and fill to volume with 0.5 percent potassium phosphate buffer, pH 7.0, and mixture, in equal parts. Proceed as directed in § 148e.5(b)(1)(ii)(*c*), using the following calculations:

$$\frac{\begin{array}{l}\text{Sample absorbance}\\ -\text{Sample blank absorbance}\end{array}}{\text{Standard factor K}} \times \frac{20}{\text{Number of capsules used}} = \begin{array}{c}\text{Milligrams of erythromycin}\\ \text{base per capsule.}\end{array}$$

Proceed as directed in § 148e.5(b)(1)(ii)(*c*) to derive the standard factor K. Its potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the equivalent number of milligrams of erythromycin base that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter, using 250 milligrams of the powder.

§ 148e.18 [Reserved]

§ 148e.19 Erythromycin glucoheptonate dental cones.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin glucoheptonate dental cones are composed of erythromycin glucoheptonate, with or without one or more suitable and harmless binders and diluents. The erythromycin glucoheptonate content of each cone is equivalent to not less than 5 milligrams of erythromycin base. The moisture content is not more than 1.5 percent. The crystalline erythromycin glucoheptonate used conforms to the standards prescribed by § 148e.3(a)(1) (i), (iii), (vi), (vii), and (viii). Each other ingredient used, if its name is recognized in the U.S.P. or N.F., conforms to the standard prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin glucoheptonate used for potency, toxicity, moisture, pH, crystallinity, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The erythromycin glucoheptonate used: 10 packages, each containing 500 milligrams.

(*b*) The batch: A minimum of 30 cones.

(*c*) In case of an initial request for certification, each other ingredient used: One package, each containing 5 grams.

(4) *Fees.* $4.00 for each package submitted in accordance with subparagraph (3)(ii)(*a*) and (*c*) of this paragraph; $0.75 for each cone submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures:

(i) *Microbiological assay.* Proceed as directed in § 148e.3(b)(1), except prepare the sample as follows: Blend a representative number of cones in 500 milliliters of 0.1*M*-phosphate buffer, pH 8.

(ii) *Spectrophotometric assay.* Reduce 20 dental cones to a fine powder, transfer the powdered material to a 500-milliliter volumetric flask, and add 400 milliliters of distilled water. Shake, and let stand for about 5 minutes to allow soluble matter to go into solution. Dilute to 500 milliliters with distilled water, and shake well. Proceed as directed in § 148e.1(b)(1)(ii)(*c*), using the following calculation:

$$\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{\text{Standard factor K}\times\text{Number of dental cones tested}}=\text{Milligrams of erythromycin base per dental cone.}$$

(2) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

§ 148e.20 Erythromycin glucoheptonate-polymyxin B sulfate for otic solution.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin glucoheptonate-polymyxin B sulfate for otic solution is a packaged combination of one immediate container of dry erythromycin glucoheptonate powder and one immediate container of polymyxin B sulfate in a diluting fluid. It may contain one or more suitable local anesthetic agents and preservatives. When reconstituted as directed in its labeling, each milliliter contains not less than the equivalent of 5 milligrams of erythromycin base and not less than 10,000 units of polymyxin B sulfate. Its pH is not less than 6.0 and not more than 8.0. The moisture content of the dry powder is not more than 5.0 percent. The crystalline erythromycin glucoheptonate used conforms to the requirements of § 148e.3 (a)(1) (i), (vi), (vii), and (viii). The polymyxin B sulfate used conforms to the requirements of § 148p.1(a)(1) (i), (iii), (iv), and (v) of this chapter. Each other ingredient used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin glucoheptonate used in making the batch for potency, moisture, pH, crystallinity, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, moisture, pH, and identity.

(*c*) The batch for potency, pH and for moisture content of the erythromycin glucoheptonate dry powder.

(ii) Samples required:

(*a*) The erythromycin glucoheptonate used in making the batch: 10 packages, each consisting of not less than 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each consisting of not less than 500 milligrams.

(*c*) The batch:

(*1*) For all tests except moisture: A minimum of 7 packages.

(*2*) For moisture content: A minimum of 8 containers.

(*d*) In case of an initial request for certification, each other ingredient used: One package consisting of not less than 5 grams.

(4) *Fees.* $4.00 for each package or container submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each package submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Erythromycin glucoheptonate*—(*a*) *Microbiological assay.* Proceed as directed in § 148e.3(b)(1)(i), using the drug prepared as directed in its labeling.

(*b*) *Spectrophotometric assay.* Dilute the dry contents of the vial to 250 milliliters with distilled water. Proceed as directed in § 148e.1(b)(1)(ii)(*c*), using the following calculation:

$$\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{2\times\text{Factor K}}=\text{Milligrams of erythromycin base per vial.}$$

The erythromycin glucoheptonate content is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Polymyxin B sulfate.* Proceed as directed in § 148p.1(b)(1) of this chapter, using the drug reconstituted as directed in its labeling. The polymyxin B sulfate content is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter, using the erythromycin glucoheptonate dry powder.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the reconstituted solution.

§ 148e.21 Erythromycin sulfate-polymyxin B sulfate otic solution.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin sulfate-polymyxin B sulfate otic solution is erythromycin sulfate and polymyxin B sulfate, with or without one or more suitable and harmless preservatives and buffers, and with or without one or more suitable local-anesthetic agents, dissolved in a suitable and harmless vehicle. Each milliliter contains the equivalent of not less than 5 milligrams of erythromycin base and not less than 10,000 units of polymyxin B sulfate. Its pH is not less than 5.5 and not more than 8.5. The erythromycin sulfate used conforms to the requirements of § 148e.8(a)(1). The polymyxin B sulfate used conforms to the requirements of § 148p.1(a)(1) (i), (iii), (iv), and (v) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F. conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin sulfate used in making the batch for potency, moisture, pH, identity, and crystallinity.

(*b*) The polymyxin B sulfate used in making the batch for potency, moisture, pH, identity.

(*c*) The batch for potency and pH.

(ii) Samples required:

(*a*) The erythromycin sulfate used in making the batch: 10 packages, each consisting of 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each consisting of 500 milligrams.

(*c*) The batch: A minimum of 6 immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: 1 container of each containing not less than 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Erythromycin content.* Proceed as directed in § 148e.1(b)(1)(i), using a 1.0-milliliter aliquot of the solution. The erythromycin sulfate content is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams of erythromycin activity that it is represented to contain.

(ii) *Polymyxin content.* Proceed as directed in § 148p.1(b)(1) of this chapter, using a 1.0-milliliter aliquot of the solution. The polymyxin B sulfate content is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted solution.

§ 148e.22 Erythromycin estolate for pediatric drops.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin estolate for pediatric drops is a dry mixture of erythromycin estolate, with or without suspending and dispersing agents, buffer substances, diluents, colorings, and flavorings. When reconstituted as directed in the labeling, each milliliter contains not less than the equivalent of 100 milligrams of erythromycin base. Its moisture content is not more than 2.0 percent. Its pH is not less than 5.0 nor more than 5.5. The erythromycin estolate used conforms to the requirements prescribed by § 148e.5(a)(1). Each other ingredient used, if its name is recognized in the U.S.P. or the N.F., conforms with the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin estolate used in making the batch for potency, toxicity, pH, moisture, crystallinity, and identity.

(*b*) The batch for potency, moisture, and pH.

(ii) Samples required:

(*a*) The erythromycin estolate used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*b*) The batch: a minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package, each consisting of not less than 5 grams.

(4) *Fees.* $4.00 for each package or immediate container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures:

(i) *Microbiological assay.* Proceed as directed in § 148e.11(b)(1)(i).

(ii) *Spectrophotometric assay.* Reconstitute the suspension as directed in the labeling, and transfer 1 milliliter of the suspension to a 1-liter volumetric flask. Dissolve and dilute the suspension with an equal-parts mixture of absolute alcohol and 0.5 percent potassium phosphate buffer, pH 7.0. Hydrolyze the erythromycin estolate solution to erythromycin by keeping it at room temperature for approximately 20 hours or by keeping the solution in a 60° C. constant-temperature bath for 180 minutes. Proceed as directed in § 148e.5(b)(1)(ii)(*c*), using the following calculations:

$$\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{\text{Standard factor K}}\times 2=\text{Milligrams of erythromycin base per milliliter.}$$

The erythromycin estolate potency is satisfactory if it is not less than 90 percent nor more than 115 percent of the amount it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the suspension reconstituted as directed in the labeling.

§ 148e.23 [Reserved]

§ 148e.24 Erythromycin glucoheptonate for intravenous infusion.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin glucoheptonate for intravenus infusion is a dry mixture of erythromycin glucoheptonate and one or more suitable and harmless buffer substances. It contains the equivalent of not less than 250 milligrams of erythromycin activity per vial. It is sterile. It is nontoxic. It is nonpyrogenic. It contains no histamine nor histamine-like substances. Its moisture content is not more than 5 percent. Its pH is not less than 6.0 nor more than 8.0. The erythromycin glucoheptonate used conforms to the standards prescribed by § 148e.3 of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin glucoheptonate used in making the batch for potency, crystallinity, and identity.

(*b*) The batch for potency, sterility, pyrogens, toxicity, histamine, moisture, and pH.

(ii) Samples required:

(*a*) The erythromycin glucoheptonate used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: A minimum of 10 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One container, each containing not less than 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii)(*a*) and (*c*) of this paragraph; $10.00 for each container submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures:

(i) *Microbiological assay.* Dissolve the entire contents of an ampul in sufficient absolute methyl alcohol to give a concentration of 10 milligrams of erythromycin base per milliliter. Proceed as directed in § 148e.3(b)(1)(i).

(ii) *Spectrophotometric assay.* Dissolve the entire contents of the ampul in sufficient distilled water to give a concentration of 2 milligrams per milliliter. Dilute further with distilled water to give a concentration of 0.2 milligram per milliliter, and proceed as directed in § 148e.3(b)(1)(ii).

Calculation:

$$\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{\text{Standard factor K}}\times\frac{\text{Total dilution of sample}}{500}=\text{Milligrams of erythromycin per ampul.}$$

Its potency is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Sterility.* Proceed as directed in § 148e.3(b)(2) of this chapter.

(3) *Pyrogens.* Proceed as directed in § 148e.3(b)(3) of this chapter, using a test dose of 1 milliliter per kilogram of a solution containing 50 milligrams of erythromycin activity per milliliter.

(4) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using a test dose of 0.5 milliliter of a solution in sterile distilled water containing 2 milligrams of erythromycin activity per milliliter.

(5) *Histamine.* Proceed as directed in § 148e.3(b)(5).

(6) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a solution containing 25 milligrams of erythromycin activity per milliliter.

§ 148e.25 Erythromycin lactobionate for intravenous infusion.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin lactobionate for intravenous infusion is a dry mixture of erythromycin lactobionate and one or more suitable and harmless buffer substances. It contains the equivalent of not less than 300 milligrams of erythromycin base per vial. It is sterile. It is nonpyrogenic. It is nontoxic. It contains no histamine nor histamine-like substances. Its moisture content is not more than 5 percent. Its pH is not less than 6.5 and not more than 7.5. The erythromycin lactobionate used conforms to the requirements of § 148e.4(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin lactobionate used in making the batch for potency, crystallinity, and identity.

(*b*) The batch for potency, sterility, pyrogens, toxicity, histamine, moisture, and pH.

(ii) Samples required:

(*a*) The erythromycin lactobionate used in making the batch: 10 containers, each consisting of not less than 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: A minimum of 10 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One container of each, consisting of not less than 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) (*a*), (*b*)(*i*), and (*c*) of this paragraph; $10.00 for all containers submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Dissolve the entire contents of the vial in sufficient distilled water to give a concentration of 10 milligrams of erythromycin base per milliliter (estimated). Proceed as directed in § 148e.1 (b)(1)(i).

(2) *Sterility.* Proceed as directed in § 148e.4(b)(3).

(3) *Pyrogens.* Proceed as directed in § 148e.4(b)(3).

(4) *Toxicity.* Proceed as directed in § 148e.4(b)(4).

(5) *Histamine.* Proceed as directed in § 148e.4(b)(5).

(6) *Moisture.* Proceed as directed in §141a.26(e) of this chapter.

(7) *pH.* Proceed as directed in § 148e.4(b)(7).

§ 148e.26 Erythromycin tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin tablets are erythromycin base, with or without one or more suitable and harmless buffer substances, diluents, binders, lubricants, colorings, and flavorings, and with or without one or more suitable sulfonamides. The potency of each tablet is not less than 50 milligrams. Tablets not exceeding 15 millimeters in diameter, or, not intended only for preparing solutions, shall disintegrate within 1 hour. The moisture content is not more than 7.5 percent. The erythromycin base used in making the batch conforms to the requirements of § 148e.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin base used in making the batch for potency, toxicity, pH, crystallinity, and identity.

(*b*) The batch for potency, disintegration time, and moisture.

(ii) Samples required:

(*a*) The erythromycin base used in making the batch: Six packages, each containing 500 milligrams.

(*b*) The batch:

(*1*) For all tests except disintegration time: A minimum of 30 tablets.

(*2*) For disintegration time: A minimum of 6 tablets.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: 1 package, each containing not less than 5 grams.

(4) *Fees.* $0.75 for each tablet submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $3.00 for all tablets submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph; $4.00 for each package submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures:

(i) *Microbiological assay.* Proceed as directed in § 148e.1(b)(1)(i), except prepare the sample in the following manner: Blend a representative number of tablets in a high-speed glass blender with absolute methyl alcohol.

(ii) *Spectrophotometric assay*—(*a*) *Erythromycin base.* Place 10 tablets in a 150-milliliter beaker and add 50 milliliters of distilled water. Continue washing and decanting with small portions of distilled water until the colored exterior coating is removed. Allow the tablets to dry, and grind in a mortar. Wash the ground tablets into a 1-liter volumetric flask using 100 milliliters of reagent-grade methyl alcohol and 100 milliliters of distilled water, and fill to volume with distilled water. Filter and dilute 20 milliliters of the filtrate with distilled water to 250 milliliters. Proceed as directed in § 148e.1(b)(1)(ii)(c), using the following calculation:

$$2.5\times\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{\text{Standard factor K}}=\text{Milligrams of erythromycin base per tablet.}$$

(*b*) *Erythromycin base with sulfonamides.* Grind several tablets and weigh an amount of the powder equal to one-half tablet. Transfer the powder to a 125-milliliter separatory funnel; add 25 milliliters of chloroform and 25 milliliters of water and shake for 1 minute. Add 10 milliliters of 10 percent sodium hydroxide solution, and shake for 1 minute. Collect the chloroform extractive in another separatory funnel. Repeat the extraction with four 25-milliliter portions of chloroform. Shake the combined chloroform extractives with 10 milliliters of water, and filter the chloroform through a layer of anhydrous sodium sulfate into a 150-milliliter beaker. Evaporate the chloroform filtrate in a current of air while warming on a steam bath. Shake the aqueous portion with two 10-milliliter portions of chloroform, and wash funnel with chloroform. Evaporate to dryness, and dissolve the residue in 10 milliliters of absolute methyl alcohol. Transfer the solution to a 500-milliliter volumetric flask and wash the residue in the beaker into this volumetric flask with four 10-milliliter portions of absolute methyl alcohol. Adjust the volume to 500 milliliters with distilled water, and proceed as directed in § 148e.1(b)(1)(ii)(c), using the following calculation:

$$2\times\frac{\text{Sample absorbance}-\text{Sample blank absorbance}}{\text{Factor K}}=\text{Milligrams of erythromycin base per tablet.}$$

The erythromycin base content is satisfactory if it is not less than 90 percent and not more than 115 percent of the amount it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *Disintegration time.* Proceed as directed in § 141a.9(c) of this chapter.

§ 148e.27 Erythromycin stearate tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin stearate tablets are tablets composed of erythromycin stearate, with or without one or more suitable and harmless buffer substances, diluents, binders, lubricants, colorings, and flavorings, and with or without one or more suitable sulfonamides. The potency of each tablet is not less than the equivalent of 50 milligrams of erythromycin base. Tablets not exceeding 15 millimeters in diameter, or not intended only for preparing solutions, shall disintegrate within 1 hour. The moisture content is not more than 7 percent. The erythromycin stearate used in making the tablets conforms to the requirements of § 148e.6(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin stearate used in making the batch for potency, toxicity, pH, crystallinity, and identity.

(*b*) The batch for potency, moisture, and disintegration time.

(ii) Samples required:

(*a*) The erythromycin stearate used in making the batch: Six containers, each consisting of not less than 500 milligrams.

(*b*) The batch:

(*1*) For all tests except disintegration time: A minimum of 30 tablets.

(*2*) For disintegration time: A minimum of 6 tablets.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package, each containing not less than 5 grams.

(4) *Fees.* $0.75 for each tablet submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $3.00 for all tablets submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph; $4.00 for each package submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148e.26(b)(1)(i).

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *Disintegration time.* Proceed as directed in § 141a.9(c) of this chapter.

§ 148e.28 Erythromycin estolate tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Erythromycin estolate tablets are tablets composed of erythromycin estolate, with or without suitable and harmless buffer substances, diluents, binders, lubricants, colorings, and flavorings, and with or without suitable sulfonamides. The potency of each tablet is not less than the equivalent of 50 milligrams of erythromycin base. Tablets not exceeding 15 millimeters in diameter, or not intended only for preparing solutions, shall disintegrate within 1 hour. The moisture content is not more than 4.0 percent. The erythromycin estolate used conforms to the requirements of § 148e.5(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The erythromycin estolate used in making the batch for potency, toxicity, pH, crystallinity, and identity.

(*b*) The batch for potency, disintegration time, and moisture.

(ii) Samples required:

(*a*) Erythromycin estolate used in making the batch: Six packages, each containing not less than 500 milligrams.

(*b*) The batch:

(*1*) For all tests except disintegration time: A minimum of 30 tablets.

(*2*) For disintegration time: A minimum of 6 tablets.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package, each containing not less than 5 grams.

(4) *Fees.* $0.75 for each tablet submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $3.00 for all tablets submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph; $4.00 for each package submitted in accordance with subparagraphs (3)(ii) (*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following procedures.

(i) *Microbiological assay.* Proceed as directed in § 148e.26(b)(1)(i).

(ii) *Spectrophotometric assay.* Finely powder 10 tablets and accurately weigh a sample equivalent to one-third of a tablet, and transfer to a 125-milliliter separatory funnel. Add 10 milliliters of water and 40 milliliters of chloroform, and then shake for 1 minute. Add 5 milliliters of 10 percent sodium hydroxide solution, and shake for 1 minute. Collect the chloroform extractive in a 250-milliliter separatory funnel. Extract the alkaline suspension four more times with 25-milliliter portions of chloroform. Combine the chloroform extractive in the 250-milliliter separatory funnel, and wash the combined extractives with 10 milliliters of water. Extract the 10 milliliters of wash water with two 10-milliliter portions of chloroform. Filter the combined chloroform extractives through a layer of anhydrous sodium sulfate and evaporate to dryness on a steam bath with the aid of an air current. Dissolve and transfer the residue with five 10-milliliter portions of methyl alcohol to a 500-milliliter volumetric flask. Add methyl alcohol to total 150 milliliters and then fill the flask to volume with 0.5 percent potassium phosphate buffer, pH 7.0. Hydrolyze the erythromycin estolate solution to erythromycin by keeping it at room temperature for 20 hours, or by keeping the solution in a 60° C. constant-temperature bath for 180 minutes. Proceed as directed in § 148e.5(b)(1)(ii)(*c*), using the following calculation:

$$\frac{\text{Sample absorbance—Sample blank absorbance}}{\text{Standard factor K}}\times 3=\text{Milligrams of erythromycin base per tablet.}$$

(2) *Moisture:* Proceed as directed in § 141a.5(a) of this chapter.

(3) *Disintegration time:* Proceed as directed in § 141a.9(c) of this chapter.

PART 148i—NEOMYCIN SULFATE

Sec.
148i.1 Neomycin sulfate.
148i.2 Neomycin undecylenate.
148i.3 Neomycin sulfate ointment; neomycin sulfate cream.
148i.4 Neomycin sulfate capsules.
148i.5 Neomycin sulfate tablets.
148i.6 Neomycin sulfate oral suspension.
148i.7 Neomycin sulfate nasal suspension; neomycin sulfate nasal solution.
148i.8 Neomycin sulfate otic solution.
148i.9 Neomycin sulfate ophthalmic solution (neomycin sulfate eye and ear drops).
148i.10 Neomycin sulfate lotion; neomycin sulfate foam aerosol.
148i.11 [Reserved]
148i.12 Neomycin sulfate suppositories.
148.i13 Neomycin sulfate for intramuscular injection.
148i.14 Neomycin sulfate surgical powder.
148i.15 Neomycin sulfate-polymyxin B sulfate ophthalmic solution; neomycin sulfate-polymyxin B sulfate ophthalmic solution; neomycin sulfate-polymyxin B sulfate ophthalmic suspension.
148i.16 Neomycin sulfate-polymyxin B sulfate ointment.
148i.17 [Reserved]
148i.18 Neomycin sulfate-polymyxin B sulfate otic solution; neomycin sulfate-polymyxin B sulfate otic suspension.
148i.19 Neomycin sulfate-polymyxin B sulfate vaginal suppositories.
148i.20 Neomycin sulfate-polymyxin B sulfate-gramicidin ophthalmic solution.
148i.21 Neomycin sulfate-polymyxin B sulfate-gramicidin nasal solution.
Sec.
148i.22 [Reserved]
148i.23 Neomycin sulfate-gramicidin ophthalmic solution; neomycin sulfate-gramicidin ophthalmic suspension.
148i.24 Neomycin sulfate-gramicidin otic solution.
148i.25 Neomycin sulfate-gramicidin lotion.
148i.26 Neomycin sulfate-gramicidin cream; neomycin sulfate-gramicidin ointment.
148i.27 Neomycin sulfate eye or ear ointment.
148i.28 Neomycin sulfate-kaolin-pectin suspension.
148i.29 Neomycin sulfate-nystatin tablets.

AUTHORITY: §§ 148i.1 to 148i.29 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148i.1 Neomycin sulfate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate is the sulfate salt of a kind of neomycin or a mixture of two or more such salts. It is so purified and dried that:

(i) It has a potency of not less than 600 micrograms of neomycin base per milligram.

(ii) It is sterile.

(iii) It is nontoxic.

(iv) It is nonpyrogenic.

(v) It contains no histamine nor histamine-like substance.

(vi) Its moisture content is not more than 8.0 percent.

(vii) Its pH in an aqueous solution containing 33 milligrams per milliliter is not less than 5.0 and not more than 7.5.

(viii) It exhibits absorption maxima, within ±2 millimicrons, at 232 millimicrons and 285 millimicrons when dissolved in sulfuric acid, and the ratio of the absorption peak at 230 ±2 millimicrons and 285 ±2 millimicrons, $\frac{A_{285}}{A_{232}}$, is not less than 1.20 and not more than 1.50.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, sterility, pyrogens, toxicity, histamine, moisture, pH, and identity.

(ii) Samples required:

(*a*) For all tests except sterility: 10 packages, each containing approximately 500 milligrams.

(*b*) For sterility testing: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $10.00 for each container submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Cylinders (cups).* Use cylinders described in § 141a.1(a) of this chapter.

(ii) *Culture media.* Using ingredients that conform to the standards prescribed by the U.S.P. or N.F., make nutrient agar for the seed and base layers:

Beet extract	1.5 gm.
Yeast extract	3.0 gm.
Peptone	6.0 gm.
Agar	15.0 gm.
Distilled water, q.s	1,000.0 ml.

pH 7.8 to 8.0 after sterilization.

(iii) *Working standard.* Dry the working standard for 3 hours at 60° C. and a pressure of not more than 5 millimeters, and weigh out a sufficient quantity to make a convenient stock solution by diluting with a 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0. This stock solution when stored at a temperature of approximately 15° C. or less may be used for a period not exceeding 1 month.

(iv) *Preparation of sample.* Dissolve volumetrically in 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0, the sample to be tested to make a convenient stock solution. Further dilute volumetrically this solution with 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0, to a final concentration of 10.0 micrograms (estimated) per milliliter, if the test organism is Staphylococcus aureus, or 1.0 microgram per milliliter (estimated) if the test organism is Staphylococcus epidermidis.

(v) *Preparation of test organism.* (*a*) The test organism is Staphylococcus aureus (ATCC 6538P), which is maintained on the agar described in subdivision (ii) of this subparagraph, except that its pH after sterilization is 6.5 to 6.6. From a stock slant, inoculate a Roux bottle containing 300 milliliters of this same agar and incubate for 24 hours at 32° C.–35° C. Wash the resulting growth from the agar surface with about 50 milliliters of sterile sodium chloride solution. Using a suitable photoelectric colorimeter with a filter having a wavelength of 580 millimicrons, adjust the suspension so that a 1:20 dilution gives 25 percent light transmission. Determine by test plates the amount of the bulk suspension to be added to the seed layer to obtain satisfactory zones (usually 0.5 percent). The suspension may be used for 1 week if it is stored under refrigeration.

(*b*) Staphylococcus epidermidis (ATCC 12228), which is maintained on agar described in subdivision (ii) of this subparagraph, may also be used as the test organism. From a stock slant, inoculate a Roux bottle containing this medium and incubate for 24 hours at 32° C.–35° C. Wash the resulting growth from the agar surface, using approximately 50 milliliters of sterile sodium chloride solution, and adjust the suspension so that a 1:25 dilution of it will permit 25 percent light transmission through a filter of 580 millimicrons in a photoelectric colorimeter. Determine by test plates the amount of the bulk suspension to be added to the seed layer to obtain satisfactory zones (usually 2 percent). The suspension may be stored for 1 week under refrigeration.

(vi) *Preparation of plates.* Use plates the same day they are prepared. Evenly distribute 21 milliliters of the melted agar described in subdivision (ii) of this subparagraph to each Petri dish (20 millimeters×100 millimeters); cover with porcelain tops, glazed on the outside, and allow to harden. Evenly spread over the surface of each plate 4.0 milliliters of the same type of melted agar, which has been cooled to approximately 48° C. and inoculated with an organism described in subdivision (v) of this subparagraph. After the seed layer has hardened, place 6 cylinders on the inoculated agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(vii) *Standard curve.* Using the stock working standard solution prepared as in subdivision (iii) of this subparagraph, prepare solutions in 0.1*M* potassium phosphate buffer, pH 8.0, in concentrations of 6.4, 8.0, 10.0, 12.5, and 15.6 micrograms per milliliter if the test organism is Staphylococcus aureus (ATCC 6538P), or in concentrations of 0.64, 0.80, 1.0, 1.25, and 1.56 micrograms per milliliter if the test organism is Staphylococcus epidermidis (ATCC 12228). The 10.0 micrograms per milliliter and the 1.0 microgram per milliliter concentrations are used as the reference points. Use a total of 12 plates, 3 plates for each solution except the reference point solution which is included on each plate. On each of the three plates, fill three cylinders with the reference point solution and the other three cylinders with the concentrations under test. Thus, there will be 36 reference point determinations and 9 determinations for each of the other points on the curve. After the plates have incubated, read the diameters of the circles of inhibition. Average the readings of the reference point concentration and the readings of the point tested for each set of three plates and average also all 36 readings of the reference point concentration. The average of the 36 readings of the reference point concentration is the correction point of the curve. Correct the average value obtained for each point to the figure it would be if the reference point reading for that set of three plates were the same as the correction point. Thus, when the Staphylococcus epidermidis method is used, if in correcting the 0.8-microgram concentration, the average of the 36 readings of the 1.0 microgram per milliliter (reference point) concentration is 16.5 millimeters and the average of the 1.0 microgram per milliliter concentration of the set of 3 plates (the 0.8 microgram per milliliter set) is 16.3 millimeters, the correction is +0.2 millimeter. If the average readings of the 0.8 microgram per milliliter concentration of these same three plates is 15.9 millimeters, the corrected value is then 16.1 millimeters. Plot these corrected values, including the average of the 1.0 microgram per milliliter concentration, on 2-cycle semilog paper, using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L = Calculated zone diameter for the lowest concentration of the standard curve;
H = Calculated zone diameter for the highest concentration of the standard curve;
c = Average zone diameter of 36 readings of the reference point standard solution;
a, b, d, e = Corrected average values for the other standard solutions, lowest to highest concentrations, respectively.

(viii) *Assay procedure.* Use 3 plates for each sample. Fill three cylinders on each plate with the standard and three cylinders with the sample, which has been diluted to the reference point, alternating standard and sample. Incubate the plates for 16 hours to 18 hours at 32° C.–35° C., and then measure the diameter of each zone of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the reference point zone of the standard curve. If the average value is lower than the standard value, subtract the difference between them from the reference point value on the curve. From the curve, read the potencies corresponding to these corrected values of zone sizes.

(2) *Sterility.* Using 500 milligrams from each container tested, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using 0.5 milliliter of a solution prepared by diluting the sample to approximately 200 micro-

grams activity per milliliter with sterile U.S.P. saline T.S.

(4) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using a test dose of 1.0 milliliter per kilogram of a solution containing 10 milligrams per milliliter in pyrogen-free, sterile saline, T.S.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, using as a test dose 0.6 milliliter per kilogram of a solution containing 5 milligrams per milliliter in sterile U.S.P. saline T.S.

(6) *Moisture.* In an atmosphere of about 10 percent relative humidity, transfer about 100 milligrams of the finely powdered sample to a tared weighing bottle equipped with ground-glass top and stopper. Weigh the bottle and place it in a vacuum oven, tilting the stopper on its side so that there is no closure during the drying period. Dry at a temperature of 60° C. and a pressure of 5 millimeters of mercury or less for 3 hours. At the end of the drying period, fill the vacuum oven with air dried by passing it through a drying agent such as sulfuric acid or silica gel. Replace the stopper and place the weighing bottle in a desiccator over a desiccating agent such as phosphorous pentoxide or silica gel, allow to cool to room temperature, and reweigh. Calculate the percent loss.

(7) *pH.* Proceed as directed in § 141a.5 (b) of this chapter, using a solution containing 33 milligrams per milliliter.

(8) *Identity.* Dissolve about 10 milligrams accurately weighed in 1 milliliter of water, add 5 milliliters of an aqueous 40 percent sulfuric acid solution, and heat in a boiling water bath for 100 minutes. Cool and dilute to a volume of 25 milliliters with water. Use a suitable recording ultraviolet spectrophotometer and 1-centimeter quartz cells. Set the instrument to 100 percent transmission with an 8 percent sulfuric acid solution. Record the spectrum from 220 millimicrons to 300 millimicrons. The ratio of the two absorbances $\left(\frac{A_{285}}{A_{232}}\right)$ should be not less than 1.20 and not more than 1.50.

§ 148i.2 Neomycin undecylenate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin undecylenate is the undecylenate salt of a kind of neomycin or a mixture of two or more such salts. It is so purified and dried that:

(i) It contains not less than 300 milligrams of neomycin base activity per milligram, calculated on the anhydrous basis.

(ii) Its moisture content is not more than 5.0 percent.

(iii) The pH of a solution containing 50 milligrams per milliliter in 80 percent methyl alcohol is not less than 6.5 and not more than 7.0.

(iv) It gives positive identity tests for neomycin and undecylenic acid.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, moisture, pH, and identity.

(ii) Samples required: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(4) *Fees.* $4.00 for each package in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1 (b)(1), except prepare the sample for assay as follows: Accurately weigh approximately 500 milligrams of neomycin undecylenate, transfer to a 250-milliliter volumetric flask, add 50 milliliters of chloroform, and mix well. Adjust to volume with absolute alcohol, and mix well. Dilute an aliquot with 0.1*M* potassium phosphate buffer, pH 8.0 to the reference point.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, except use a solution containing 50 milligrams per milliliter in 80 percent methyl alcohol.

(4) *Identity*—(i) *Reagents.* (*a*) Normal sulfuric acid.

(*b*) Chloroform.

(*c*) 0.1*N* potassium permanganate.

(*d*) Freshly distilled aniline.

(*e*) 95 percent ethyl alcohol.

(*f*) Ethyl ether.

(*g*) Activated carbon.

(*h*) 70 percent ethyl alcohol.

(*i*) Normal sodium hydroxide.

(*j*) Triketohydrindene hydrate (Ninhydrin) reagent: Dissolve 200 milligrams of triketohydrindene hydrate in water to make 10 milliliters. Prepare this solution fresh.

(ii) *Procedure.* Suspend 5 grams of neomycin undecylenate in 20 milliliters of normal sulfuric acid. Heat this suspension in a boiling water bath until the liberated undecylenic acid separates on the surface of the aqueous phase. Allow to cool. Transfer the mixture to a separatory funnel and extract it with three 10-milliliter portions of chloroform. Save the aqueous phase in the separator. Filter the combined chloroform extractives through a small pledget of cotton. Heat on a steam bath until the chloroform is completely evaporated. Perform the following tests on the residual liquid:

(*a*) *Undecylenate identity.* (*1*) To about 1 milliliter of the liquid, add potassium permanganate solution dropwise; the permanganate color is discharged.

(*2*) Place about 3 milliliters of the solution and 3 milliliters of freshly distilled aniline in a tall test tube, and heat for 10 minutes at a rate such that the ring of condensate remains just below the mouth of the tube. Cool, add 10 milliliters of alcohol and 10 milliliters of ether, and transfer to a separator. Wash the ether solution with four 20-milliliter portions of water, and discard the water washings. Heat on a steam bath until the odor of ether is no longer perceptible, then add a few milligrams of activated carbon, mix well, and filter. Evaporate the filtrate nearly to dryness, and recrystallize the residue from 70 percent alcohol; the anilide so obtained, after drying, melts between 66° C.–67.5° C.

(*b*) *Neomycin identity.* (*1*) Carefully render just alkaline a 1:10 dilution of the filtrate of the aqueous phase remaining in the separator after chloroform extraction by adding, dropwise, normal sodium hydroxide. Add 1 milliliter of triketohydrindene hydrate reagent; a deep-violet color develops slowly on standing.

(*2*) Add 1 milliliter of sulfuric acid to 1 milliliter of the clear filtrate. Cool, then add 2 drops of a 10 percent solution of α-naphthol in alcohol; a violet color develops on standing. On dilution with 10 milliliters of water, the solution becomes turbid due to the formation of a blue-violet precipitate which dissolves on the addition of 10 milliliters of alcohol, yielding a pale-yellow solution.

§ 148i.3 Neomycin sulfate ointment; neomycin sulfate cream.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate ointment and neomycin sulfate cream is neomycin sulfate in a suitable and harmless ointment or cream base, with or without suitable and harmless buffer substances and dispersing and suspending agents. It may contain cortisone or a suitable derivative of cortisone and one or more suitable proteolytic enzymes Its potency is not less than 3.5 milligrams per gram. If an ointment, its mosture content is not more than 1.0 percent. The neomycin sulfate used conforms to the requirements prescribed by § 148i.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements prescribed by § 148.3 of this chapter, except that, if it is intended solely for topical use and it does not contain cortisone or a derivative of cortisone or a proteolytic enzyme, in lieu of the statement "Caution: Federal law prohibits dispensing without prescription," each package shall include information containing directions and warnings adequate for the use of the drugs by the laity. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages each containing approximately 500 milligrams.

(*b*) The batch: Minimum 5 immediate containers.

(*c*) In the case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each immediate container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Extraction (ointment only)*. Proceed as directed in § 148i.1(b)(1) of this chapter, except prepare the sample by placing a representative portion of the ointment (usually approximately 1 gram, accurately weighed) into a separatory funnel containing 50 milliliters of peroxide-free ether. Shake the sample and ether until homogeneous. Add 25 milliliters of 0.1*M* potassium phosphate buffer, pH 8.0, and shake well. Allow the layers to separate. Remove the buffer layer and repeat the extraction with new portions of the buffer at least three times and any additional times necessary to insure complete extraction of the antibiotic. Combine the extractives and adjust to an appropriate volume to give a stock solution of convenient concentration. Make further dilutions with 0.1*M* potassium phosphate buffer, pH 8.0.

(ii) *Blending (ointments or creams)*. Proceed as directed in § 148i.1(b)(1), except prepare the sample for assay as follows: Prepare an adjusted buffer by making a 1.0 percent solution of 1*N* NaOH in 0.1*M* phosphate buffer, pH 8.0. Transfer an accurately weighed sample into a high-speed glass blender, add 1.0 milliliter of polysorbate 80 and sufficient adjusted phosphate buffer to give a stock solution of convenient concentration. Blend 3 to 5 minutes. The content of neomycin is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* If the product is an ointment, proceed as directed in § 141a.8(b) of this chapter.

§ 148i.4 Neomycin sulfate capsules.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate capsules are capsules composed or neomycin sulfate, with or without one or more suitable and harmless buffer substances, vegetable oils, preservatives, diluents, binders, lubricants, colorings, and flavorings, enclosed in gelatin capsules. Each capsule shall contain not less than 50 milligrams of neomycin sulfate. The moisture content is not more than 4.0 percent. The neomycin sulfate used conforms to the requirements of § 148i.1(a)(1), (i), (iii), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: Minimum 30 capsules.

(*c*) In the case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $0.75 for each capsule submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph; $4.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1(b)(1), except place a representative number of capsules (usually 5 to 12) in a high-speed glass blender in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to make a stock solution of convenient concentration. Blend for 3 to 5 minutes. Further dilute an aliquot in 0.1*M* potassium phosphate buffer, pH 8.0, to give a solution of 10.0 micrograms (estimated) per milliliter if the test organism is Staphylococcus aureus or to 1.0 microgram (estimated) per milliliter if the test organism is Staphylococcus epidermidis. The content of neomycin is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of activity that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

§ 148i.5 Neomycin sulfate tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate tablets are tablets that conform to all requirements and are subject to all procedures prescribed in § 148i.3(a) for neomycin sulfate capsules. In addition to the requirements prescribed by § 148i.3(a), tablets not exceeding 15 millimeters in diameter, or not intended only for preparing solutions, shall disintegrate within 1 hour.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The batch for potency, moisture, and disintegration time.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except disintegration time: Minimum 30 tablets.

(*2*) For disintegration time studies: Six tablets.

(*c*) In the case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees:* $0.75 for each tablet submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $3.00 for all tablets in the sample submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph; $4.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.3(b)(1). Its potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of neomycin that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *Disintegration time.* Proceed as directed in § 141a.9(c) of this chapter.

§ 148i.6 Neomycin sulfate oral suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate oral suspension is neomycin sulfate, with or without one or more suitable and harmless suspending and dispersing agents, colorings, flavorings, buffer substances, and preservatives, suspended or dissolved in a suitable and harmless vehicle. It may contain pectin, kaolin, and one or more suitable sulfonamides. Each milliliter shall contain not less than the equivalent of 7.0 milligrams of neomycin base. Its pH is not less than 4.0 and not more than 5.0. The neomycin sulfate used conforms to the requirements of § 148i.1(a)(1) (i), (iii), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The batch for potency and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: Minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each immediate container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1(b)(1), except place a representative sample in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a stock solution of convenient concentration. Further dilute in 0.1*M* potassium phosphate buffer, pH 8.0, to give a final concentration of 10.0 micrograms (estimated) per milliliter if the test organism is Staphylococcus aureus or 1.0 microgram (estimated) per milliliter if the test organism is staphylococcus epidermidis. Its content of neomycin is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of activity that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted suspension.

§ 148i.7 Neomycin sulfate nasal suspension; neomycin sulfate nasal solution.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate nasal suspension and neomycin sulfate nasal solution are neomycin sulfate and a suitable vasoconstrictor, with or without one or more suitable and harmless suspending or dispersing agents, preservatives, buffer substances, colorings, and flavorings, and with or without cortisone or a suitable derivative of cortisone, suspended in a suitable and harmless vehicle. Each milliliter contains the equivalent of not less than 3.5 milligrams of neomycin base. The pH is not less than 5.5 and not more than 6.5. The neomycin used conforms to the requirements of § 148i.1(a)(1) (i), (iii), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The batch for potency and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: A minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees:* $4.00 for each immediate container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1 (b)(1), except dilute volumetrically a representative sample in sufficient $0.1M$ potassium phosphate buffer, pH 8.0, to give a stock solution of convenient concentration. Further dilute an aliquot in $0.1M$ potassium phosphate buffer, pH 8.0, to give a final concentration of 10.0 micrograms (estimated) per milliliter if the test organism is Staphylococcus aureus or of 1.0 microgram (estimated) per milliliter if the organism is Staphylococcus epidermidis. Its content of neomycin is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of activity that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5 (b) of this chapter, using the undiluted sample.

§ 148i.8 Neomycin sulfate otic solution.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate otic solution is neomycin sulfate, with or without one or more suitable and harmless buffer substances and preservatives, suspended or dissolved in a suitable and harmless vehicle. It may contain cortisone or a suitable derivative of cortisone. Each milliliter shall contain the equivalent of not less than 2.5 milligrams of neomycin base. Its pH is not less than 5.5 and not more than 7.5. The neomycin sulfate used conforms to the requirements prescribed by § 148i.1 (a)(1) (i), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for potency and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: Minimum of five immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1 (b)(1), except dilute volumetrically a representative sample in sufficient $0.1M$ potassium phosphate buffer, pH 8.0, to give a stock solution of convenient concentration. Further dilute volumetrically in $0.1M$ potassium phosphate buffer, pH 8.0, to give a concentration of 10.0 micrograms (estimated) per milliliter if the test organism is Staphylococcus aureus or 1.0 microgram (estimated) per milliliter if the test organism is Staphylococcus epidermidis. Its content of neomycin is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of activity that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted sample.

§ 148i.9 Neomycin sulfate ophthalmic solution (neomycin sulfate eye and ear drops).

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate ophthalmic solution and neomycin sulfate eye and ear drops is neomycin sulfate, with or without one or more suitable and harmless buffer substances and preservatives, dissolved or suspended in a suitable and harmless vehicle. It may contain cortisone or a suitable derivative of cortisone. Each milliliter shall contain not less than the equivalent of 3.5 milligrams of neomycin base. It is sterile. Its pH is not less than 6.0 and not more than 7.5. The neomycin sulfate used conforms to the requirements prescribed by § 148i.1(a)(1) (i), (ii), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for: Potency, sterility, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 containers, each containing approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: A minimum of 10 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) (*a*), (*b*)(*1*), and (3)(ii) (*c*) of this paragraph; $10.00 for all containers submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.6 (b)(1). Its neomycin content is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Sterility.* Proceed as directed in § 141a.2 of this chapter, using the equivalent of approximately 0.5 gram activity, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted sample.

§ 148i.10 Neomycin sulfate lotion; neomycin sulfate foam aerosol.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate lotion or neomycin sulfate foam aerosol is neomycin sulfate suspended or dissolved in a suitable and harmless vehicle, with or without one or more suitable and harmless suspending agents, colorings, and preservatives. Neomycin sulfate foam is packaged with one or more suitable and harmless inert gases. Both may contain cortisone or a suitable derivative of cortisone. Each gram contains the equivalent of not less than 3.5 milligrams of neomycin base. Its moisture content is not more than 1.0 percent. The neomycin sulfate used conforms to the requirements of § 148i.1(a)(1) (i), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 300 milligrams.

(*b*) The batch: Minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in 148i.1 (b)(1), except prepare the sample as follows:

(i) *Neomycin sulfate lotion.* Place a representative sample, accurately measured, into a high-speed glass blender with sufficient volume of 0.1*M* potassium phosphate buffer, pH 8, to give a stock solution of convenient concentration. Blend 3 to 5 minutes. Make further dilutions with 0.1*M* potassium phosphate buffer, pH 8.

(ii) *Neomycin sulfate aerosol spray.* Spray the entire contents of the well-shaken sample into a large tared beaker. Place in a vacuum desiccator, evacuate, and allow to stand at room temperature for 16 hours to 18 hours. After the gas has volatilized, accurately weigh the beaker and contents and determine the weight of the material in the beaker. Remove a representative quantity (usually approximately 1 gram, accurately weighed) of the residue and place in sufficient 0.1*M* potassium phosphate buffer, pH 8, to give a stock solution of convenient concentration.

Its potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of neomycin that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.8(b) of this chapter.

§ 148i.12 Neomycin sulfate suppositories.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate suppositories are suppositories composed of neomycin sulfate in a suitable and harmless base, with or without one or more suitable and harmless preservatives. It may contain cortisone or a suitable derivative of cortisone. Each suppository contains the equivalent of not less than 15 milligrams of neomycin base. The moisture content is not more than 1.0 percent. The neomycin sulfate used conforms to the requirements of § 148i.1 (a)(1)(i), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. The expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: A minimum of 30 suppositories.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $0.75 for each suppository in the sample submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $4.00 for each package in the sample submitted in accordance with subparagraph (3)(ii) (*b*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1 (b)(1) of this chapter, except prepare the sample by blending, in a high-speed glass blender, a representative number of suppositories (usually 5 to 12) with 1.0 milliliter of polysorbate 80 and sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a stock solution of convenient concentration. The content of neomycin is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 148i.8(b).

§ 148i.13 Neomycin sulfate for intramuscular injection.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate for intramuscular injection is a dry powder composed of neomycin sulfate, with or without one or more suitable and harmless preservatives, buffer substance, and dispersing agents. Each vial contains the equivalent of not less than 350 milligrams of neomycin base. It is sterile. It is nonpyrogenic. It is nontoxic. It contains no histamine nor histamine-like substances. Its moisture content is not more than 8.0 percent. Its pH in an aqueous solution containing the equivalent of 33 milligrams of neomycin base per milliliter is not less than 5.0 and not more than 7.5. The neomycin sulfate used conforms to the requirements of § 148i.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the requirements prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for potency, sterility, pyrogens, toxicity, histamine, moisture, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: A minimum of 10 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing not less than 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) (*a*), (*b*)(*1*), and (*c*) of this paragraph; $10.00 for all containers submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1 (b)(1). Its potency is satisfactory if it contains the equivalent of not less than 90 percent and not more than 115 percent of the number of milligrams of neomycin that it is represented to contain.

(2) *Sterility.* Proceed as directed in § 148i.1(b)(2).

(3) *Pyrogens.* Proceed as directed in § 148i.1(b)(4).

(4) *Toxicity.* Proceed as directed in § 148i.1(b)(3).

(5) *Histamine.* Proceed as directed in § 148i.1(b)(5).

(6) *Moisture.* Proceed as directed in § 148i.1(b)(6).

(7) *pH.* Proceed as directed in § 148i.1 (b)(7).

§ 148i.14 Neomycin sulfate surgical powder.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate surgical powder is neomycin sulfate, with or without one or more suitable and harmless diluents, preservatives, and lubricants. Each gram of powder contains not less than the equivalent of 350 milligrams of neomycin base. It is sterile. Its moisture content is not less than 8.0 percent. The neomycin sulfate used conforms to the requirements prescribed by § 148i.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the requirements prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for potency, sterility, and moisture.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: A minimum of 5 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing not less than 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) (*a*), (*b*)(*1*), and (*c*) of this paragraph; $10.00 for all containers submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.1(b)(1). Its potency is satisfactory if it contains the equivalent of not less than 90 percent and not more than 115 percent of the number of milligrams of neomycin that it is represented to contain.

(2) *Sterility.* Proceed as directed in § 148i.1(b)(2).

(3) *Moisture.* Proceed as directed in § 148i.1(b)(6).

§ 148i.15 Neomycin sulfate-polymyxin B sulfate ophthalmic solution; neomycin sulfate-polymyxin B sulfate ophthalmic suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-polymyxin B sulfate ophthalmic solution and neomycin sulfate-polymyxin B sulfate ophthalmic suspension are neomycin sulfate and polymyxin B sulfate, with or without cortisone or a derivative of cortisone, and with or without one or more suitable and harmless preservatives, buffer substances, suspending and wetting agents, and diluents, dissolved or suspended in distilled water. Each milliliter contains not less than 3.5 milligrams of neomycin and not less than 12,500 units of polymyxin. The solution or suspension is sterile. The pH is not less than 5.0 and not more than 7.0. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1). The polymyxin B sulfate used conforms to the standards prescribed by § 148p.1 (a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*c*) The batch for potency, sterility, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch for:

(*1*) All tests except sterility: A minimum of 6 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each immediate container or package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), (*c*)(*1*), and (*d*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*c*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Remove a representative portion from the sample with a suitable syringe, place into an appropriate-sized volumetric flask, and proceed as directed in § 148i.1 (b)(1). Its content of neomycin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Polymyxin content.* Remove a representative portion with a suitable syringe, place in an appropriate-sized volumetric flask and proceed as directed in § 148p.1(b)(1) of this chapter, except calculate from the quantity of neomycin found in the sample, the quantity of neomycin that would be present when the sample is diluted to contain 10 units of polymyxin (labeled potency) per milliliter. Prepare the polymyxin standard curve and the daily standards by adding this quantity of neomycin to each concentration. The content of polymyxin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(2) *Sterility.* Using the entire contents of one immediate container, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor a control tube is used in the test for bacteria.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted sample.

§ 148i.16 Neomycin sulfate-polymyxin B sulfate ointment.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-polymyxin B sulfate ointment is neomycin sulfate and polymyxin B sulfate, with or without cortisone or a suitable derivative of cortisone, and with or without one or more suitable and harmless preservatives, emollients, and suspending and dispersing agents in a suitable and harmless ointment base. Each gram contains not less than 3.5 milligrams of neomycin base and not less than 5,000 units of polymyxin B sulfate. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) (i), (vi), (vii), and (viii). The polymyxin B sulfate used conforms to the standards prescribed by § 148p.1(a)(1) (i), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, moisture, pH, and identity.

(*c*) The batch for potency and moisture.

(*1*) The number of milligrams of neomycin sulfate per gram of ointment.

(*2*) The number of units of polymyxin B sulfate per gram of ointment.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch: A minimum of 6 immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Proceed as directed in § 148i.3(b)(1)(ii). Its content of neomycin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Polymyxin content.* Proceed as directed in § 148p.3(b)(1), except calculate from the quantity of neomycin found when assayed in accordance with subdivision (i) of this subparagraph, the quantity of neomycin that would be present when the sample is diluted to contain 10 units of polymyxin (labeled potency) per milliliter. Prepare the polymyxin standard curve and the polymyxin daily standard by adding this calculated quantity of neomycin to each concentration of polymyxin used for the curve. Use this standard curve to calculate the polymyxin content of the sample. Its content of polymyxin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

§ 148i.18 Neomycin sulfate-polymyxin B sulfate otic solution; neomycin sulfate-polymyxin B sulfate otic suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-polymyxin B sulfate otic solution or neomycin sulfate-polymyxin B sulfate otic suspension is a mixture of neomycin sulfate and polymyxin B sulfate, with or without cortisone and one or more suitable anesthetic agents and antiseptic agents, and with or without one or more suitable and harmless buffer substances and preservatives, suspended or dissolved in a suitable and harmless vehicle. Each milliliter or gram contains not less than 2 milligrams of neomycin base and not less than 4,000 units of polymyxin B sulfate. The pH is not less than 5.5 and not more than 8.5. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) (i), (vi), (vii), and (viii). The polymyxin B sulfate used conforms to the standards prescribed by § 148p.1(a)(1) (i), (vi), (vii), and (x) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, moisture, pH, and identity.

(*c*) The batch for neomycin potency, polymyxin B potency, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch: A minimum of 6 immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Proceed as directed in § 148i.8(b)(1), except that if the vehicle contains liquid petrolatum prepare the sample for assay as follows: Accurately weigh a representative portion (usually approximately 1 gram) and transfer to a high-speed glass blender. Add 1.0 milliliter of polysorbate 80 and sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a stock solution of convenient concentration. Blend 3 to 5 minutes. The content of neomycin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Polymyxin content.* Proceed as directed in § 148i.17(b)(1), except that if the vehicle contains liquid petrolatum, prepare the sample for assay as follows: Accurately weigh a representative portion (usually 1 gram) and place in a high-speed glass blender. Add 1.0 milliliter of polysorbate 80 and sufficient 10 percent potassium phosphate buffer, pH 6.0, to give a stock solution of convenient concentration. Blend 3 to 5 minutes. Modify the polymyxin standard curve and the daily working standards as follows: Calculate from the quantity of neomycin found in the sample when assayed in accordance with subdivision (i) of this subparagraph, the quantity of neomycin that would be present when the sample is diluted to contain 10 units of polymyxin (labeled potency) per milliliter. Prepare the polymyxin standard curve and the polymyxin daily standard by adding the calculated quantity of neomycin to each concentration of polymyxin used for the curve. Use this standard curve to calculate the polymyxin content of the sample. Its content of polymyxin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted sample.

§ 148i.19 Neomycin sulfate-polymyxin B sulfate vaginal suppositories.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-polymyxin B sulfate vaginal suppositories are suppositories made of neomycin sulfate and polymyxin B sulfate, with or without *N*-acetyl-4-hydroxy-*m*-arsanilic acid, and with or without one or more suitable and harmless surface-acting agents, fillers, binders, lubricants, emollients, dispersing agents, and diluents, in a suitable and harmless base. Each suppository contains the equivalent of not less than 3.5 milligrams of neomycin base activity, and not less than 20,000 units of polymyxin B sulfate. The moisture content is not more than 1.0 percent. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) (i), (iii), (vi), (vii), and (viii). The polymyxin B sulfate used conforms to the standards prescribed by § 148p.1(a)(1) (i), (iv), (vi), (vii), and (viii) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*c*) The batch for neomycin potency, polymyxin potency, and moisture.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each containing approximately equal portions or not less than 500 milligrams.

(*c*) The batch: Not less than 30 suppositories.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $1.00 for each suppository submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Proceed as directed in § 148i.1(b)(1), except prepare the sample for assay as follows: Place a representative number of suppositories (usually 5 to 12) into a high-speed glass blender with 1.0 milliliter of polysorbate 80 and sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a stock solution of convenient concentration. Blend 3 to 5 minutes. The content of neomycin is satisfactory, if it contains not less than 85 percent and not more than 120 percent of the number of milligrams of activity that it is represented to contain.

(ii) *Polymyxin content.* Proceed as directed in § 148p.1(b)(1) of this chapter, except prepare the sample for assay as follows: Place a representative number of suppositories (usually 5 to 12) into a high-speed glass blender, and add 1.0 milliliter of polysorbate 80 and sufficient 10 percent potassium phosphate buffer, pH 6.0, to give a stock solution of convenient concentration. Modify the polymyxin standard curve as follows: Calculate from the quantity of neomycin found when assayed in accordance with subdivision (i) of this subparagraph, the quantity of neomycin that would be present when the sample is diluted to contain 10 units of polymyxin (labeled potency) per milliliter. Prepare the polymyxin standard curve and the polymyxin daily standards by adding this calculated quantity of neomycin to each concentration of polymyxin used for the curve. Use this standard curve to calculate the polymyxin content of the sample. Its content of polymyxin is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.8(b) of this chapter.

§ 148i.20 Neomycin sulfate-polymyxin B sulfate-gramicidin ophthalmic solution.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-polymyxin B sulfate-gramicidin ophthalmic solution is neomycin sulfate, polymyxin B sulfate, and gramicidin, with or without one or more suitable and harmless dispersing and suspending agents, buffer substances, diluents, surfactants, and antiseptics, dissolved in a suitable and harmless vehicle. Each milliliter contains not less than 1.75 milligrams of neomycin base activity, not less than 5,000 units of polymyxin B sulfate, and not less than 0.025 milligram of gramicidin. It is sterile. Its pH is not less than 5.0 and not more than 6.0. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1). The polymyxin B sulfate used conforms to the standards prescribed by § 148p.1(a)(1) of this chapter. The gramicidin used conforms to the standards prescribed by § 148f.1(a)(1) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*c*) The gramicidin used in making the batch for potency, toxicity, moisture, crystallinity, and identity.

(*d*) The batch for neomycin potency, polymyxin potency, gramicidin potency, sterility, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The gramicidin used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*d*) The batch:

(*1*) For all tests except sterility: Minimum of 7 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*e*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), (*c*), and (*e*) of this paragraph; $6.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*d*)(*1*) of this paragraph; $10.00 for all immediate containers submitted in accordance with subparagraph(3)(ii)(*d*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Proceed as directed in § 148i.15(b)(1)(i). The neomycin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Polymyxin content.* Proceed as directed in § 148i.15(b)(1)(ii). The polymyxin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(iii) *Gramicidin content.* Proceed as directed in § 148f.1(b)(1) of this chapter, except to prepare the sample for assay remove a representative sample with a suitable syringe, place into an appropriate-sized volumetric flask, and dilute with 95 percent ethyl alcohol to give a stock solution of convenient concentration. The gramicidin content is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(2) *Sterility.* Using the entire contents from each immediate container, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted solution.

§ 148i.21 Neomycin sulfate-polymyxin B sulfate-gramicidin nasal solution.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-polymyxin B sulfate-gramicidin nasal solution is a solution of neomycin sulfate, polymyxin B sulfate, and gramicidin, with or without cortisone or a suitable derivative of cortisone, with or without a suitable vasoconstrictor and local anesthetic, and with or without one or more suitable and harmless buffer substance, diluents, surfactants, and anti-inflammatory agents, dissolved in distilled water. Each milliliter contains not less than the equivalent of 0.6 milligram of neomycin base activity, 2,000 units of polymyxin B sulfate, and 0.05 milligram of gramicidin. The pH is not less than 5.0 and not more than 6.5. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) (i), (iv), (vi), (vii), and (viii). The polymyxin B sulfate used conforms to the standards prescribed by § 148p.1(a)(1) (i), (iii), (vi), (vii), and (viii) of this chapter. The gramicidin used conforms to the standards prescribed by § 148f.1 (a)(1) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The polymyxin B sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*c*) The gramicidin used in making the batch for potency, toxicity, moisture, crystallinity, and identity.

(*d*) The batch for neomycin potency, polymyxin potency, gramicidin potency, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing not less than approximately 500 milligrams.

(*b*) The polymyxin B sulfate used in making the batch: 10 packages, each containing not less than approximately 500 milligrams.

(*c*) The gramicidin used in making the batch: 10 packages, each containing not less than 500 milligrams.

(*d*) The batch: A minimum of 7 immediate containers.

(*e*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), (*c*), and (*e*) of this paragraph; $6.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*d*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Proceed as directed in § 148i.20(b)(1)(i). Its content of neomycin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Polymyxin content.* Proceed as directed in § 148i.15(b)(1)(ii). Its content of polymyxin B sulfate is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of units that it is represented to contain.

(iii) *Gramicidin content.* Proceed as directed in § 148f.1(b)(1) of this chapter, except to prepare the sample for assay remove a representative sample with a suitable syringe, place into an appropriate-sized volumetric flask and dilute with 95 percent ethyl alcohol to give a stock solution of convenient concentration. Its content of gramicidin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(2) *pH*. Proceed as directed in § 141a.5(b) of this chapter, using the undiluted sample.

§ 148i.23 Neomycin sulfate-gramicidin ophthalmic solution; neomycin sulfate-gramicidin ophthalmic suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity*. Neomycin sulfate-gramicidin ophthalmic solution or neomycin sulfate-gramicidin ophthalmic suspension is neomycin sulfate and gramicidin, with or without cortisone or a suitable derivative of cortisone, and one or more suitable antiseptics and vasoconstrictors, and with or without one or more suitable and harmless buffer substances, suspending agents, dispersing agents, surfactants, preservatives, and diluents, dissolved or suspended in sterile distilled water. Each milliliter contains the equivalent of not less than 0.66 milligram of neomycin base and not less than 0.025 milligram of gramicidin activity. It is sterile. The pH is not less than 6.0 and not more than 7.4. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1). The gramicidin used conforms to the standards prescribed by § 148f.1(a)(1) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by each official compendium.

(2) *Labeling*. It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification*. In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The gramicidin used in making the batch for potency, toxicity, moisture, crystallinity, and identity.

(*c*) The batch for neomycin potency, gramicidin potency, sterility, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The gramicidin used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch:

(*1*) For all tests except sterility: A minimum of 6 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees*. $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii)(*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*c*)(*1*) of this paragraph; $10.00 for all immediate containers submitted in accordance with subparagraph (3)(ii)(*c*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content*. Proceed as directed in § 148i.15(b)(1)(i), using an aliquot of 1.0 milliliter of the sample. The neomycin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Gramicidin content*. Proceed as directed in § 148f.1(b)(1) of this chapter, except to prepare the sample for assay place a 1.0-milliliter aliquot of the sample in an appropriate sized volumetric flask and dilute with 95 percent ethyl alcohol to give a stock solution of convenient concentration. The content of gramicidin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(2) *Sterility*. Using the entire contents of an immediate container, proceed as directed in § 148a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *pH*. Proceed as directed in § 141a.5(b) of this chapter, using the undiluted sample.

§ 148i.24 Neomycin sulfate-gramicidin otic solution.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity*. Neomycin sulfate-gramicidin otic solution is a solution of neomycin sulfate and gramicidin, with or without cortisone or a suitable derivative of cortisone, with or without one or more suitable local antiseptics and antifungal agents, and with or without one or more suitable and harmless surfactants, buffer substances, preservatives, and diluents, dissolved in distilled water. Each milliliter contains the equivalent of not less than 0.66 milligram of neomycin base and not less than 0.05 milligram of gramicidin activity. The pH is not less than 5.0 and not more than 6.0. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1)(i), (vi), (vii), and (viii). The gramicidin used conforms to the standards prescribed by § 148f.1(a)(1) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling*. It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Requests for certification*. In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The gramicidin used in making the batch for potency, moisture, crystallinity, and identity.

(*c*) The batch for neomycin potency, gramicidin potency, and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The gramicidin used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch: Seven immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees*. $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii)(*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content*. Proceed as directed in § 148i.15(b)(1)(i). The neomycin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Gramicidin content*. Proceed as directed in § 148f.1(b)(1) of this chapter, except to prepare the sample for assay, remove a representative sample with a suitable syringe, place in an appropriate-sized volumetric flask, and dilute with 95 percent ethyl alcohol to give a stock solution of convenient concentration. The gramicidin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(2) *pH*. Proceed as directed in § 141a.5(b) of this chapter, using the undiluted solution.

§ 148i.25 Neomycin sulfate-gramicidin lotion.

(a) *Requirements for certification*—(1)—*Standards of identity, strength, quality and purity*. Neomycin sulfate-gramicidin lotion is neomycin sulfate and gramicidin, with or without cortisone or a suitable derivative of cortisone, with or without one or more antiseptics, and with or without one or more suitable and harmless buffer substances, surfactants, dispersing, suspending, and preservative agents, and diluents in a suitable and harmless lotion base. Each milliliter contains the equivalent of not less than 2.5 milligrams of neomycin base and not less than 0.25 milligram of gramicidin activity. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1)(i), (vi), (vii), and (viii). The gramicidin used conforms to the standards prescribed by § 148f.1(a)(1) of this chapter, except § 148f.1(a)(1)(ii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the requirements prescribed therefor by such official compendium.

(2) *Labeling*. It shall be labeled in accordance with the requirements of § 148.3

of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The gramicidin used in making the batch for potency, moisture, crystallinity, and identity.

(*c*) The batch for neomycin potency and gramicidin potency.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: Seven packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The gramicidin used in making the batch: Seven packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch: A minimum of 7 immediate containers.

(*d*) In case of an initial request for certification, each other substance used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Proceed as directed in § 148i.10(b)(1)(i). Its neomycin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Gramicidin content.* Proceed as directed in § 141f.1(b)(1) of this chapter, except prepare the sample by placing an accurately measured representative portion into a high-speed glass blender with sufficient 95 percent alcohol to give a stock solution of convenient concentration. Blend 3 to 5 minutes. Its gramicidin content is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

§ 148i.26 Neomycin sulfate-gramicidin cream; neomycin sulfate-gramicidin ointment.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-gramicidin cream of neomycin sulfate-gramicidin ointment is neomycin sulfate and gramicidin, with or without cortisone or a suitable derivative of cortisone, and with or without one or more suitable and harmless suspending and dispersing agents, preservatives, perfuming agents, coloring agents, and buffer substances, in a suitable and harmless cream or ointment base. Each gram contains the equivalent of not less than 2.5 milligrams of neomycin base and not less than 0.25 milligram of gramicidin activity. If it is an ointment, the moisture content is not more than 1.0 percent. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) (i), (iii), (vi), (vii), and (viii). The gramicidin used conforms to the standards prescribed by § 148f.1(a)(1) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* Its label and labeling shall comply with the requirements of § 148.3 of this chapter, except that if the drug is not for ophthalmic use or does not contain cortisone or a suitable derivative of cortisone, in lieu of the statement "Caution: Federal law prohibits dispensing without prescription," the labeling of each package shall include information containing directions and warnings adequate for use of the drug by the laity. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The gramicidin used in making the batch for potency, moisture, crystallinity, and identity.

(*c*) The batch for neomycin potency, gramicidin potency, and moisture, if it is an ointment.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: Seven packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The gramicidin used in making the batch: Seven packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch: Minimum of 7 immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Proceed as directed in § 148i.3(b)(1) (i) or (ii). Its content of neomycin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Gramicidin content*—(*a*) *Cream.* Proceed as directed in § 148f.1(b)(1) of this chapter, except prepare the sample for assay by placing an accurately weighed representative portion (usually 1 gram) into a high-speed glass blender with 1.0 milliliter of polysorbate 80 and sufficient 95 percent alcohol to give a stock solution of convenient concentration. Blend 3 to 5 minutes.

(*b*) *Ointment.* Proceed as directed in § 148f.1(b)(1) of this chapter, except prepare the sample for assay by placing an accurately weighed representative sample (usually approximately 1 gram) into a separatory funnel. Dissolve the ointment in 50 milliliters of *n*-hexane. Extract this solution with four 50-milliliter portions of 95 percent ethyl alcohol. Collect the extractives in a 250-milliliter volumetric flask, bring to volume with 90 percent ethyl alcohol, and mix well. From this stock solution, dilute an aliquot with 95 percent ethyl alcohol to reference concentration.

Its content of gramicidin is satisfactory if it is not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* If the preparation is an ointment, proceed as directed in § 141a.8(b) of this chapter.

§ 148i.27 Neomycin sulfate eye or ear ointment.

(*a*) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate eye-ear ointment is neomycin sulfate, with or without cortisone or a suitable derivative of cortisone, in a suitable and harmless ointment base. Each gram contains the equivalent of not less than 3.5 milligrams of neomycin as the base. Its moisture content is not more than 1.0 percent. The neomycin sulfate used conforms to the requirements of § 148i.1 (a)(1) (i), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The neomycin sulfate used: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The batch: A minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each consisting of approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148i.3 (b)(1) (i) or (ii). Its content of neomycin is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.8(b) of this chapter.

§ 148i.28 Neomycin sulfate-kaolin-pectin suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-kaolin-pectin suspension is neomycin sulfate, kaolin, and pectin, with or without one or more suitable and harmless suspending and dispersing agents, buffer substances, flavorings, colorings, and preservatives, suspended in distilled water. Each milliliter contains the equivalent of 7.0 milligrams of neomycin base. The pH is not less than 3.8 and not more than 4.8. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) (i), (iii), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The batch for neomycin potency and pH.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The batch: A minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each consisting of approximately 5 grams.

(4) *Fees.* $4.00 for each package or each immediate container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in 148i.1(b)(1) of this chapter, except prepare the sample for assay as follows: Accurately weigh not less than approximately 1 gram of the sample, transfer to a 250-milliliter volumetric flask, dissolve and dilute to mark with 0.1*M* potassium phosphate buffer, pH 8.0. Further dilute with 0.1*M* potassium phosphate buffer, pH 8.0, to 10 micrograms (estimated) per milliliter. The content of neomycin is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5(b) of this chapter.

§ 148i.29 Neomycin sulfate-nystatin tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Neomycin sulfate-nystatin tablets are neomycin sulfate and nystatin with a suitable and harmless binder and lubricating substance. Each tablet contains the equivalent of not less than 0.35 gram of neomycin base and not less than 125,000 units of nystatin. The moisture content is not more than 10 percent. Tablets not exceeding 15 millimeters in diameter, or not intended only for preparing solutions, shall disintegrate within 1 hour. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) (i), (iii), (vi), (vii), and (viii). The nystatin used conforms to the standards prescribed by § 148k.1(a)(1) of this chapter. Each other substance used, if its name is recognized in the U.S.P or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Requests for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The neomycin sulfate used in making the batch for potency, toxicity, moisture, pH, and identity.

(*b*) The nystatin used in making the batch for potency, toxicity, moisture, pH, and identity.

(*c*) The batch for neomycin potency, nystatin potency, moisture, and disintegration time.

(ii) Samples required:

(*a*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The nystatin used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*c*) The batch for:

(*1*) All tests except disintegration time: A minimum of 30 tablets.

(*2*) For disintegration-time studies: Six tablets.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each consisting of approximately 5 grams.

(4) *Fees.* $1.00 for each tablet submitted in accordance with subparagraph (3)(ii)(*c*)(*1*) of this paragraph; $3.00 for all tablets submitted in accordance with subparagraph (3)(ii)(*c*)(*2*) of this paragraph; $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Neomycin content.* Using not less than three tablets, proceed as directed in § 148i.5(b)(1).

(ii) *Nystatin content.* Proceed as directed in § 148k.7(b)(1) of this chapter, using not less than three tablets for preparing the sample.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *Disintegration time.* Proceed as directed in § 141a.9(c) of this chapter.

PART 148j—NOVOBIOCIN

Sec.
148j.1 Sodium novobiocin.
148j.2 Calcium novobiocin.
148j.3 Sodium novobiocin tablets.
148j.4 Calcium novobiocin tablets.
148j.5 Calcium novobiocin syrup.
148j.6 [Reserved]

AUTHORITY: §§ 148j.1 to 148j.6 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148j.1 Sodium novobiocin.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Sodium novobiocin is the crystalline monosodium salt of a kind of novobiocin or a mixture of two or more such salts. It is so purified and dried that:

(i) Its potency is not less than 800 micrograms per milligram, expressed in terms of the novobiocin acid on an anhydrous basis.

(ii) It is sterile.

(iii) It is nonpyrogenic.

(iv) It is nontoxic.

(v) It contains no histamine nor histamine-like substances.

(vi) Its moisture content is not more than 6.0 percent.

(vii) Its pH in a solution containing 25 milligrams per milliliter is not less than 6.5 and not more than 8.5.

(viii) When dissolved in 0.1*M* sodium borate, it will demonstrate a positive color identity test for novobiocin with a saturated aqueous solution of *N*,2,6-trichloroquinoneimine.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, sterility, pyrogens, toxicity, histamine, moisture, pH, crystallinity, and identity.

(ii) Samples required:

(*a*) For all tests except sterility: 10 packages, each containing approximately 500 milligrams.

(*b*) For sterility testing: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $10.00 for each container submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Cylinders (cups).* Use cylinders described in § 141a.1(a) of this chapter.

(ii) *Culture media.* Use ingredients that conform to the standards prescribed in the U.S.P. or N.F., if such name appears in either compendium.

(*a*) Make nutrient agar for the seed layer and for carrying the test organism as follows:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Glucose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s	1,000 ml.

pH 6.5 to 6.6 after sterilization.

(*b*) Make nutrient agar for the base layer as follows:

Peptone	6.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Agar	15.0 gm.
Distilled water, q.s	1,000 ml.

pH 6.5 to 6.6 after sterilization.

In lieu of preparing the media from the individual ingredients specified in this subdivision, they may be made from a dehydrated mixture which, when reconstituted with distilled water, has the same composition as such media.

(iii) *Working standard.* Dissolve volumetrically a suitable weighed quantity (30 milligrams to 50 milligrams) of the working standard, dried as described in § 141a.5(a) of this chapter, in 2 milliliters of ethyl alcohol and then add sufficient 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0, to give a concentration of 1,000 micrograms of novobiocin acid per milliliter. This stock solution may be kept for 30 days when stored under refrigeration.

(iv) *Preparation of sample.* Dissolve in sufficient 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0, to give a convenient stock solution. Further dilute in 1.0 percent potassium phosphate buffer pH 6.0, to give a final concentration of 0.5 microgram of novobiocin acid per milliliter (estimated).

(v) *Preparation of test organism.* The test organism is Staphylococcus epidermidis (ATCC 12228), which is maintained on slants of agar described in subdivision (ii)(*a*) of this subparagraph. Wash the organisms from a recently incubated slant with 3 milliliters of sterile sodium chloride solution onto a large agar surface, such as that provided by a Roux bottle containing 300 milliliters of agar. Use sterile glass beads to aid in spreading the organisms over the entire agar surface of the Roux bottle. Incubate 16 hours to 24 hours at 32° C. to 35° C. Wash the resulting growth from the agar surface with 50 milliliters of sterile sodium chloride solution. Standardize the resulting bulk suspension so that a 1:25 dilution in sodium chloride solution will give 25 percent light transmission, using a suitable photoelectric colorimeter with a 580-millimicron filter and a 13-millimeter diameter test tube as an absorption cell. Run test plates to determine the quantity of the bulk suspension (usually 1.0 milliliter) to be added to each 100 milliliters of agar that will give clear, sharp zones of inhibition of appropriate size.

(vi) *Preparation of plates.* Add 21 milliliters of the agar prepared as described in subdivision (ii)(*b*) of this subparagraph to each Petri dish (20 millimeters×100 millimeters). Distribute the agar evenly in the plates, cover with porcelain tops glazed on the outside, and allow to harden. Use plates the same day they are prepared. Melt a sufficient amount of agar described in subdivision (ii)(*a*) of this subparagraph, cool to 48° C., add the proper amount of the test organism bulk suspension as described in subdivision (v) of this subparagraph, and mix thoroughly. Add 4 milliliters of this inoculated agar to each Petri dish. Distribute the seed agar evenly in the plates, cover again, and allow to harden. After the agar has hardened, place 6 cylinders on the agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(vii) *Standard curve.* Prepare the daily standard curve by further diluting the 1,000 micrograms per milliliter stock solution in 1 percent potassium phosphate buffer, pH 6.0, to obtain concentrations of 0.32, 0.40, 0.50, 0.63, and 0.78 microgram of novobiocin acid per milliliter. Use three plates for the determination of each point on the curve, except the 0.5 microgram per milliliter concentration, a total of 12 plates. On each of three plates, fill alternately three cylinders with the 0.5 microgram per milliliter standard, and fill the other three cylinders with the concentration under test. Thus, there will be thirty-six 0.5-microgram determinations and nine determinations for each of the other points on the curve. After the plates have incubated, read the diameters of the circles of inhibition. Average the readings of the 0.5 microgram per milliliter concentration and the readings of the point tested for each of three plates, and average also all 36 readings of the 0.5 microgram per milliliter concentrations. The average of the 36 readings of the 0.5 microgram per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 0.5 microgram per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 0.4-microgram concentration, the average of the 36 readings of the 0.5-microgram concentration is 20.0 millimeters, and the average of the 0.5-microgram concentration of this set of three plates is 19.8 millimeters, the correction is +0.2 millimeter. If the average reading of the 0.4-microgram concentration of these same three plates is 19.0 millimeters, the corrected value is 19.2 millimeters. Plot these corrected values, including the average of the 0.5 microgram per milliliter concentration, on two-cycle semilog paper, placing the concentration in micrograms per milliliter on the logarithmic scale and the diameter of the zone of inhibition on the arithmetic scale. Draw the standard curve through these points either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L = Corrected zone diameter for the lowest concentration of standard curve;
H = Corrected zone diameter for the highest concentration of the standard curve;
c = Average zone diameter of 36 readings of the 0.5 microgram per milliliter standard;
a, b, d, e = Corrected average values for the 0.32, 0.40, 0.63, and 0.78 microgram per milliliter standard solutions, respectively.

Plot the values obtained for *L* and *H* and connect with a straight line.

(viii) *Assay.* Use three plates for each sample. Fill three cylinders on each plate with the standard 0.5 microgram per milliliter solution and three cylinders with the 0.5 microgram per milliliter (estimated) sample, alternating standard and sample. Incubate all plates, including those containing the standard curve, at 32° C.–35° C. overnight, and measure the diameter of each circle of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the 0.5 microgram per milliliter zone on the standard curve. If the average sample value is lower than the standard value, subtract the difference between them from the 0.5 microgram per milliliter value on the standard curve. From the curve, read the potencies corresponding to these corrected values of zone sizes.

(2) *Sterility.* Using 500 milligrams from each container tested, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using as a test dose 1.0 milliliter per kilogram of a solution prepared by diluting the sample to approximately 10 milligrams of activity per milliliter with sterile, pyrogen-free distilled water.

(4) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, except use sterile U.S.P. saline T.S. as a diluent, and administer a test dose of 0.5 milliliter of a solution containing 4 milligrams of novobiocin acid per milliliter.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, using a test dose of 0.6 milliliter per kilogram of an aqueous solution containing 3 milligrams per milliliter.

(6) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a saturated aqueous solution prepared by mixing well 25 milligrams of novobiocin acid per milliliter of distilled water.

(8) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

(9) *Identity.* (i) Using 0.1*M* aqueous sodium borate as a diluent, prepare 10 milliliters of a solution containing the equivalent of 20 micrograms (approximate) of novobiocin acid per milliliter.

(ii) Prepare a saturated aqueous solution of *N*,2,6-trichloroquinoneimine by shaking continuously for 30 minutes in a dark bottle 25 milligrams of *N*,2,6-trichloroquinoneimine in 100 milliliters of distilled water. Let stand 2 hours after shaking. Store in the dark bottle.

(iii) Add 1.0 milliliter of the saturated *N*,2,6-trichloroquinoneimine solution to 4 milliliters of the novobiocin solution. Mix well and heat in a water bath at 37° C. for 10 minutes. The development of a blue color is a positive test for the presence of novobiocin. To 2 milliliters of the blue solution, add 2 milliliters of *n*-butanol and shake well. A green color should develop in the *n*-butanol layer. To the other 2-milliliter portion of the blue solution, add 2 milliliters of benzene (c.p.), and shake well. A pink color should be developed in the benzene layer.

§ 148j.2 Calcium novobiocin.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Calcium novobiocin is the crystalline calcium salt of a kind of novobiocin or a mixture of two or more such salts. It is so purified and dried that:

(i) Its potency is not less than 800 micrograms per milligram, expressed in terms of novobiocin acid on an anhydrous basis.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 10 percent.

(iv) Its pH in a saturated aqueous suspension of 25 milligrams per milliliter is not less than 6.5 and not more than 8.5.

(v) When dissolved in 0.1*M* sodium borate it will demonstrate a positive color identity test for novobiocin with saturated aqueous solution of *N*,2,6-trichloroquinoneimine.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, pH, crystallinity, and identity.

(ii) Samples required: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148j.1 (b)(1), except prepare the stock solution of the sample by dissolving and diluting with absolute ethyl alcohol to an estimated concentration of 1,000 micrograms per milliliter. The solution for assay is diluted with 1 percent potassium phosphate buffer, pH 6.0, to an estimated concentration of 0.5 microgram per milliliter.

(2) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, except use sterile U.S.P. saline T.S. as the diluent, and inject 0.5 milliliter of a solution containing the equivalent of 2 milligrams of novobiocin acid per milliliter.

(3) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a saturated aqueous solution prepared by suspending 25 milligrams of calcium novobiocin per milliliter.

(5) *Identity.* (i) Using 0.1*M* aqueous sodium borate as a diluent, prepare 10 milliliters of a solution containing the equivalent of 20 micrograms (approximate) novobiocin acid per milliliter.

(ii) Prepare a saturated aqueous solution of *N*,2,6-trichloroquinoneimine by shaking continuously for 30 minutes in a dark bottle, 25 milligrams of *N*,2,6-trichloroquinoneimine in 100 milliliters of distilled water. Let stand 2 hours after shaking. Store in the dark bottle.

(iii) Add 1.0 milliliter of the saturated *N*,2,6-trichloroquinoneimine solution to 4 milliliters of the novobiocin solution. Mix well, and heat in a water bath at 37° C. for 10 minutes. The development of a blue color is a positive test for the presence of novobiocin. To 2 milliliters of the blue solution, add 2 milliliters of *n*-butanol, and shake well. A green color should develop in the *n*-butanol layer. To the other 2-milliliter portion of the blue solution, add 2 milliliters of benzene (c.p.) and shake well. A pink color should be developed in the benzene layer.

§ 148j.3 Sodium novobiocin tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Sodium novobiocin tablets are tablets that contain sodium novobiocin, with or without one or more suitable and harmless buffer substances, diluents, binders, lubricants, colorings, and flavorings, and with or without one or more suitable sulfonamides. Each tablet contains not less than 125 milligrams of novobiocin. Its moisture content is not more than 3 percent. Tablets not exceeding 15 millimeters in diameter, or not intended only for preparing solutions, shall distintegrate within 1 hour. The crystalline sodium novobiocin used conforms to the requirements of § 148j.1 (a)(1) (i), (iv), (vi), (vii), and (viii). Each other substance used, if its name is recognized in the U.S.P. or N.F., shall conform to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) Novobiocin sodium used in making the batch for potency, toxicity, moisture, pH, crystallinity, and identity.

(*b*) The batch for potency, moisture, disintegration time.

(ii) Samples required:

(*a*) Novobiocin sodium used in making the batch: 10 packages, each containing equal portions of approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except disintegration time: Minimum of 30 tablets.

(*2*) For disintegration time studies: Six tablets.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $0.75 for each tablet in the sample submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $3.00 for all tablets in the sample submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph; $4.00 for each immediate container submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148j.1 (b)(1), except prepare the sample by placing a representative number of tablets (usually 5 to 12) in a high-speed glass blender with sufficient 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0, to give a stock solution of convenient concentration. The average content of novobiocin is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that each is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *Disintegration time.* Proceed as directed in § 141a.9(c) of this chapter. The tablets are satisfactory if they disintegrate within 1 hour.

§ 148j.4 Calcium novobiocin tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Calcium novobiocin tablets are tablets composed of calcium novobiocin, with or without one or more suitable sulfonamides and with or without one or more suitable harmless colorings, binders, flavorings, diluents, lubricants, and buffer substances. Each tablet contains not less than 125 milligrams of novobiocin. Its moisture content is not more than 4.0 percent. Tablets not exceeding 15 millimeters in diameter, or not intended only for preparing solutions, shall disintegrate within 1 hour. The novobiocin calcium used meets the requirements of § 148j.2(a)(1) of this chapter, except § 148j.2(a)(1) (ii), (iii), and (v). Each other substance used, if its name appears in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The calcium novobiocin used in making the batch for potency, toxicity, moisture, pH, crystallinity, and identity.

(*b*) The batch for potency, moisture, and disintegration time.

(ii) Samples required:

(*a*) The calcium novobiocin used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except disintegration time: Minimum of 30 tablets.

(*2*) For disintegration time: Six tablets.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing not less than approximately 5 grams.

(4) *Fees.* $4.00 for each container in the samples submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph; $0.75 for each tablet submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; and $3.00 for all tablets submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Blend a representative number of tables (usually 5 to 12) in a high-speed glass blender for 3 to 5 minutes with sufficient absolute ethyl alcohol to give a stock solution of convenient concentration. Proceed further as directed in § 148j.2(b)(1). The average content of novobiocin is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter, using not less than three tablets ground to a fine powder.

(3) *Disintegration time.* Proceed as directed in § 141a.9(c) of this chapter.

§ 148j.5 Calcium novobiocin syrup.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Calcium novobiocin syrup is a syrup prepared from calcium novobiocin, with or without one or more suitable sulfonamides and with or without one or more suitable and harmless buffer substances, suspending and stabilizing agents, preservatives, coloring, and flavoring substances suspended or dissolved in a suitable and harmless vehicle. Each milliliter contains not less than 25 milligrams of novobiocin. The pH is not less than 6.0 and not more than 7.0. The calcium novobiocin used conforms to the requirements of § 148j.2(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The calcium novobiocin used in making the batch for potency, toxicity, moisture, pH, crystallinity, and identity.

(*b*) The batch for potency and pH.

(ii) Samples required:

(*a*) The calcium novobiocin used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: Minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing not less than 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Remove a representative sample of the syrup with a suitable syringe, place into a high-speed glass blender with sufficient absolute ethyl alcohol to give a concentration (estimated) of 1,000 micrograms per milliliter. Blend for 3 to 5 minutes. Proceed further as directed in § 148j.2(b)(1). Its novobiocin content is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted syrup.

PART 148o—PAROMOMYCIN

Sec.
148o.1 Paromomycin sulfate.
148o.2 Paromomycin sulfate capsules.
148o.3 Paromomycin sulfate syrup.

AUTHORITY: §§ 148o.1 to 148o.3 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148o.1 Paromomycin sulfate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality and purity.* Paromomycin sulfate is the sulfate salt of a kind of paromomycin or a mixture or two or more such salts. It is a creamy-white to light-yellow powder. It is so purified and dried that:

(i) Its potency is not less than 750 micrograms per milligram on an anhydrous basis.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 5.0 percent.

(iv) The pH in a 3.0 percent aqueous solution is not less than 5.0 and not more than 7.5.

(v) Its specific rotation at 25° C. in water is not less than +50° and not more than +55° on an anhydrous basis.

(vi) Its ash content is not more than 2.0 percent.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, pH, specific rotation, and ash content.

(ii) Samples of the batch: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Plate assay using Staphylococcus epidermidis*—(*a*) *Cylinders (cups).* Use cylinders described in § 141a.1(a) of this chapter.

(*b*) *Culture media.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F.

(*1*) Make nutrient agar for maintaining the test organism as follows:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Glucose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 6.5 to 6.6 after sterilization.

(*2*) Use the nutrient agar described in this subsection for the seed layer and base layer, except that its pH after sterilization is 7.8 to 8.0.

(*c*) *Working standard.* Dry approximately 30 milligrams of the working standard for 3 hours at 60° C. and a pressure of 5 millimeters or less. Determine the weight of the dried standard and dissolve in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a concentration of 1,000 micrograms of paromomycin per milliliter. This stock solution may be kept in the refrigerator for 3 weeks.

(*d*) *Preparation of sample.* Dissolve the sample in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a convenient stock solution. Further dilute in 0.1*M* potassium phosphate buffer, pH 8.0, to give a final concentration of 1.0 microgram per milliliter (estimated).

(*e*) *Preparation of test organism.* The test organism is *Staphylococcus epidermidis* (ATCC 12228), which is maintained on slants of agar described in (*b*)(*1*) of this subdivision. Wash the organism from the agar slant with 3 milliliters of sterile sodium chloride solution onto a large agar surface such as that provided by a Roux bottle containing 300 milliliters of the agar described in (*b*)(*1*) of this subdivision. Spread the suspension of organisms over the entire agar surface with the aid of sterile glass beads. Incubate for 24 hours at 32° C., and then wash the resulting growth from the agar surface with 50 milliliters of sterile sodium chloride solution. Standardize the suspension, so that a 1:25 dilution will give 25 percent light transmission, using a suitable photoelectric colorimeter with a 580-millimicron filter and a 13-millimeter diameter test tube as an absorption cell. Run plates to determine the quantity of the bulk suspension (usually 0.16 milliliter) that should be added to each 100 milliliters of agar to give clear, sharp zones of inhibition of appropriate size.

(*f*) *Preparation of plates.* Add 21 milliliters of the agar prepared as described in (*b*)(*2*) of this subdivision to each Petri dish (20 millimeters×100 millimeters). Distribute the agar evenly in the plates and allow it to harden. Use plates the same day they are prepared. Melt a sufficient amount of agar described in (*b*)(*2*) of this subdivision, cool to 48° C., add the proper amount of the test organism as described in (*e*) of this subdivision, and mix thoroughly. Add 4 milliliters of this inoculated agar to each Petri dish. Distribute the agar evenly in the plates, cover, and allow to harden. After the agar has hardened, place 6 cylinders on the agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(*g*) *Standard curve.* Prepare the daily standard curve by further diluting the 1,000 micrograms per milliliter stock solution in 0.1*M* potassium phosphate buffer, pH 8.0, to obtain concentrations of 0.64, 0.80, 1.00, 1.25, and 1.56 micrograms per milliliter. The 1.0-microgram per milliliter solution is the reference concentration. Use three plates for the determination of each point on the curve, except the 1.0-microgram per milliliter concentration (a total of 12 plates). On each of three plates fill three cylinders with the 1.0-microgram per milliliter standard and the other three cylinders with the concentration under test. Thus, there will be thirty-six 1-microgram determinations and 9 determinations for each of the other points on the curve. After incubation, read the diameters of the circles of inhibition in the plates. Average the readings of the 1.0 microgram per milliliter concentration and the readings of the point tested for each set of three plates, and average also all 36 readings of the 1.0 microgram per milliliter concentration. The average of the 36 readings of the 1.0 microgram per milliliter concentration is the correction point of the curve. Correct the average value obtained for each point to the figure it would be if the 1.0 microgram per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 0.80-microgram concentration, the average of 36 readings of the 1.0-microgram concentration were 20.0 millimeters, and the average of the 1.0-microgram concentration of this set of three plates were 19.8 millimeters, the correction would be +0.2 millimeter. If the average reading of the 0.80-microgram concentration of the same three plates were 19.0 millimeters, the corrected value would be 19.2 millimeters. Plot these corrected values, including the average of the 5.0 micrograms per milliliter concentration, on 2-cycle semilog paper, using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points, either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L=Corrected zone diameter for the lowest concentration of the standard curve;

H=Corrected zone diameter for the highest concentration of the standard curve;

c=Average zone diameter of 36 readings of the 1.0 microgram per milliliter standard;

a, b, d, e=Corrected average values for the 0.64, 0.80, 1.25, and 1.56 micrograms per milliliter standard solutions, respectively.

Plot the values obtained for *L* and *H* and connect with a straight line.

(*h*) *Assay.* Use three plates for each sample. Fill three cylinders on each plate with the standard 1.0 microgram per milliliter solution and three cylinders with the 1.0 microgram per milliliter (estimated) sample, alternating standard and sample. Incubate all plates, including those containing the standard curve, at 32° C. to 35° C. overnight, and measure the diameter of each circle of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the 1.0 microgram per milliliter zone on the standard curve. If the average sample value is lower than the standard value, subtract the difference between them from the 1.0 microgram per milliliter value on the curve. From the standard curve, read the potencies corresponding to these corrected values of zone sizes.

(ii) *Plate assay using Bacillus subtilis.* As an alternative method, proceed as directed in § 141b.101 (a) through (i) of this chapter, except that:

(*a*) In lieu of the directions in § 141b.101(b) of this chapter, prepare the nutrient agar for the base and seed layers as follows:

Beef extract	6.0 gm.
Peptone	10.0 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 7.8–8.0 after sterilization.

(*b*) Prepare the standard stock solution as directed in subdivision (i)(*c*) of this subparagraph, and in lieu of the concentrations for the standard curve as prescribed in § 141b.101(d) of this chapter, prepare concentrations of 1.28, 1.60, 2.00, 2.50, and 3.12 micrograms per milliliter from this stock solution and use 2.00 micrograms per milliliter concentration as the reference point.

(*c*) In lieu of the directions in § 141b.101(e) of this chapter, dilute the sample to a final concentration of 2.0 micrograms per milliliter (estimated).

(2) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, except administer orally, by means of a cannula or other suitable device, to each of 5 mice, within the weight range of 18 grams to 25 grams, 0.5 milliliter of a solution of the drug in sterile distilled water containing 8.0 milligrams (activity) per milliliter.

(3) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a 3.0 percent aqueous solution.

(5) *Specific rotation.* Accurately weigh approximately 1.25 grams of the sample into a 25-milliliter volumetric flask. Dissolve in a few milliliters of water, add water to volume, and mix. Transfer the solution to a 200-millimeter tube, determine the angular rotation in a suitable polarimeter, using a sodium light or a 5893 Angstrom filter, and calculate the specific rotation.

(6) *Ash content.* Place approximately 1-gram of the sample, accurately weighed, in a tared, metal-free porcelain crucible, and add 2 milliliters of concentrated H_2SO_4. Completely char on low flame, raising the temperature gradually until fumes of SO_3 disappear. Ignite at a dull-red heat or in a muffle furnace at 1,100° F., cool and weigh.

§ 148o.2 Paromomycin sulfate capsules.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Paromomycin sulfate capsules are composed of paromomycin sulfate, with or without one or more suitable and harmless buffer substances, diluents, lubricants, and binders, enclosed in a suitable and harmless gelatin capsule. Each capsule contains not less than 250 milligrams of paromomycin activity. The moisture content is not more than 5.0 percent. The paromomycin sulfate used conforms to the standards prescribed therefor by § 148o.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The paromomycin sulfate used in making the batch for potency, toxicity, moisture, pH, specific rotation, and ash content.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The paromomycin used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The batch: A minimum of 30 capsules.

(c) In case of an initial request for certification, each other ingredient used: 1 package each consisting of not less than 5 grams.

(4) *Fees.* $0.75 for each capsule in the sample submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph; $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148o.1(b)(1), except prepare a stock solution of convenient concentration by pooling the entire contents of a representative number of capsules (usually 5 to 12) in an appropriate-sized volumetric flask and dissolve with 0.1*M* potassium phosphate buffer, pH 8.0. The average paromomycin content is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of activity that each capsule is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

§ 148o.3 Paromomycin sulfate syrup.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Paromomycin sulfate syrup is a syrup that contains paromomycin sulfate, with or without one or more suitable and harmless buffer substances, flavorings, colorings, suspending and stabilizing agents, and preservatives, suspended or dissolved in a suitable and harmless vehicle. Each milliliter contains not less than 25 milligrams of paromomycin activity per milliliter. Its pH is not less than 7.5 and not more than 8.5. The paromomycin sulfate used conforms to the requirements of § 148o.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays for:

(*a*) The paromomycin sulfate used in making the batch for potency, toxicity, moisture, pH, specific rotation, and ash content.

(*b*) The batch for potency and pH.

(ii) Samples required:

(*a*) The paromomycin sulfate used in making the batch: 10 packages, each containing approximately equal portions of not less than 300 milligrams.

(*b*) The batch: Minimum of 5 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing not less than 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148o.1 (b)(1), except prepare the sample for assay by removing an appropriate aliquot of the syrup with a suitable syringe and placing in an appropriate volumetric flask. The potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of paromomycin activity that it is represented to contain.

(2) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted sample.

All interested persons are invited to present their views in writing regarding this proposal to the Hearing Clerk, Department of Health, Education, and Welfare, Washington 25, D.C., within 30 days from the date of publication of this notice in the FEDERAL REGISTER. Such views and comments should be filed preferably in quintuplicate.

Proposal for the certification of various other antibiotic drugs will be published in the immediate future.

Dated: April 24, 1963.

GEO. P. LARRICK,
Commissioner of Food and Drugs.

[F.R. Doc. 63–4619; Filed, May 1, 1963; 8:45 a.m.]

[21 CFR Parts 146, 148, 148a–148z]

ANTIBIOTIC DRUGS

Proposed Regulations for Tests and Methods of Assay and Certification of Antibiotic Drugs Subject to the 1962 Amendments to Section 507 of the Federal Food, Drug, and Cosmetic Act

The Kefauver-Harris Drug Amendments of 1962 provide that all antibiotic drugs intended for human use shall be subject to the certification provisions of sections 502(1) and 507 of the Federal Food, Drug, and Cosmetic Act. These amendments become effective May 1, 1963. Therefore, the Commissioner of Food and Drugs, pursuant to the provisions of the act (sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357), and under the authority delegated to him by the Secretary of Health, Education, and Welfare (25 F.R. 8625), proposes to issue the following amendments and new regulations to provide for tests and methods of assay and certification of certain antibiotic drugs:

1. It is proposed to amend § 146.1 as follows:

a. By revising the section heading to read:

§ 146.1 Definitions and interpretations applicable to all certifiable antibiotic drugs.

b. By adding to paragraph (a) the following new subparagraphs:

(8) Each of the antibiotic substances produced by the growth of *Streptomyces canus*, and each of the same substances produced by any other means, is a kind of amphomycin.

(9) Each of the antibiotic substances produced by the growth of Streptomyces nodosus, and each of the same substances produced by any other means, is a kind of amphotericin.

(10) Each of the antibiotic substances produced by the growth of Bacillus polymyxa var. garyphalus, and each of the same substances produced by any other means, is a kind of colistin.

(11) Each of the antibiotic substances produced by the growth of Streptomyces orchidaceus, and each of the same substances produced by any other means, is a kind of cycloserine.

(12) Each of the antibiotic substances produced by the growth of Streptomyces erythreus, and each of the same substances produced by any other means, is a kind of erythromycin.

(13) Each of the antibiotic substances produced by the growth of Bacillus brevis, and each of the same substances produced by any other means, is a kind of gramicidin.

(14) Each of the antibiotic substances produced by the growth of Penicillium patulum or Penicillium griseofulvum, and each of the same substances produced by any other means, is a kind of griseofulvin.

(15) Each of the antibiotic substances produced by the growth of Streptomyces kanamyceticus, and each of the same substances produced by any other means, is a kind of kanamycin.

(16) Each of the antibiotic substances produced by the growth of Streptomyces fradiae, and each of the same substances produced by any other means, is a kind of neomycin.

(17) Each of the antibiotic substances produced by the growth of Streptomyces niveus (known also as Streptomyces spheroides), and each of the same substances produced by any other means, is a kind of novobiocin.

(18) Each of the antibiotic substances produced by the growth of Streptomyces noursei, and each of the same substances produced by any other means, is a kind of nystatin.

(19) Each of the antibiotic substances produced by the growth of Streptomyces antibioticus, and each of the same substances produced by any other means, is a kind of oleandomycin.

(20) [Reserved]

(21) Each of the antibiotic substances produced by the growth of Streptomyces rimosus, and each of the same substances produced by any other means, is a kind of oxytetracycline.

(22) Each of the antibiotic substances produced by the growth of Streptomyces rimosus var. paromomycinus, and each of the same substances produced by any other means, is a kind of paromomycin.

(23) Each of the antibiotic substances produced by the growth of Bacillus polymyxa, and each of the same substances produced by any other means, is a kind of polymyxin.

(24) Each of the antibiotic substances produced by the growth of Nocardia lurida, and each of the same substances produced by any other means, is a kind of ristocetin.

(25) Each of the mixtures of antibiotic substances produced by the growth of Bacillus brevis, and each of the same mixtures of substances produced by any other means, is a kind of tyrothricin.

(26) Each of the antibiotic substances produced by the growth of Streptomyces orientalis, and each of the same substances produced by any other means, is a kind of vancomycin.

(27) Each of the antibiotic substances produced by the growth of Streptomyces puniceus or Streptomyces floridae or Actinomyces vinaceus, and each of the same substances produced by any other means, is a kind of biomycin.

c. By adding to paragraph (b) the following new subparagraphs:

(10) The term "amphomycin master standard" means a specific lot of amphomycin designated by the Commissioner as the standard of comparison in determining the potency of the amphomycin working standard.

(11) The term "amphotericin A master standard" means a specific lot of amphotericin A designated by the Commissioner as the standard of comparison in determining the potency of the amphotericin A working standard. The term "amphotericin B master standard" means a specific lot of amphotericin B designated by the Commissioner as the standard of comparison in determining the potency of the amphotericin B working standard.

(12) The term "colistin master standard" means a specific lot of colistin designated by the Commissioner as the standard of comparison in determining the potency of the colistin working standard.

(13) The term "cycloserine master standard" means a specific lot of cycloserine designated by the Commissioner as the standard of comparison in determining the potency of the cycloserine working standard.

(14) The term "erythromycin master standard" means a specific lot of erythromycin designated by the Commissioner as the standard of comparison in determining the potency of the erythromycin working standard.

(15) The term "gramicidin master standard" means a specific lot of gramicidin designated by the Commissioner as the standard of comparison in determining the potency of the gramicidin working standard.

(16) The term "griseofulvin master standard" means a specific lot of griseofulvin designated by the Commissioner as the standard of comparison in determining the potency of the griseofulvin working standard.

(17) The term "kanamycin master standard" means a specific lot of kanamycin designated by the Commissioner as the standard of comparison in determining the potency of the kanamycin working standard.

(18) The term "neomycin master standard" means a specific lot of neomycin designated by the Commissioner as the standard of comparison in determining the potency of the neomycin working standard.

(19) The term "novobiocin master standard" means a specific lot of novobiocin designated by the Commissioner as the standard of comparison in determining the potency of the novobiocin working standard.

(20) The term "nystatin master standard" means a specific lot of nystatin designated by the Commissioner as the standard of comparison in determining the potency of the nystatin working standard.

(21) The term "oleandomycin master standard" means a specific lot of oleandomycin designated by the Commissioner as the standard of comparison in determining the potency of the oleandomycin working standard.

(22) [Reserved]

(23) The term "oxytetracycline master standard" means a specific lot of oxytetracycline designated by the Commissioner as the standard of comparison in determining the potency of the oxytetracycline working standard.

(24) The term "paromomycin master standard" means a specific lot of paromomycin designated by the Commissioner as the standard of comparison in determining the potency of the paromomycin working standard.

(25) The term "polymyxin B master standard" means a specific lot of polymyxin B designated by the Commissioner as the standard of comparison in determining the potency of the polymyxin B working standard.

(26) The term "ristocetin A master standard" means a specific lot of ristocetin A designated by the Commissioner as the standard of comparison in determining the potency of the ristocetin A working standard. The term "ristocetin B master standard" means a specific lot of ristocetin B designated by the Commissioner as the standard of comparison in determining the potency of the ristocetin B working standard.

(27) The term "vancomycin master standard" means a specific lot of vancomycin designated by the Commissioner as the standard of comparison in determining the potency of the vancomycin working standard.

(28) The term "viomycin master standard" means a specific lot of viomycin designated by the Commissioner as the standard of comparison in determining the potency of the viomycin working standard.

2. It is proposed to amend paragraph (c) of § 146.3 *Certification* by changing the phrase "in parts 141a to 141e and § 147.2 of this chapter" to read "issued under this chapter."

3. It is proposed to change the introduction to § 146.10 to read:

§ 146.10 Antibiotics for export.

Drugs containing antibiotic substances subject to certification under section 507 of the act and intended for export will be certified notwithstanding failure to meet the labeling requirements of the applicable monographs if the labeling used for such drugs complies with the following conditions:

* * * * *

4. It is proposed to amend § 146.12 *Antibiotic drugs exempted from certification requirements under section 507 (c) of the Federal Food Drug and Cosmetic Act* in the following respects:

a. By changing the first sentence of paragraph (a) to read:

(a) Section 507(a) of the Federal Food, Drug, and Cosmetic Act directs the Secretary of Health, Education, and Welfare to promulgate regulations to provide for the certification of batches of drugs composed wholly or partly of any kind of antibiotic substance. * * *

b. By changing the item "Antibiotics for fish diseases" in paragraph (b)(3) to read:

Antibiotics for diseases of fish not intended for use as food.

5. It is proposed to amend § 146.22 *Exemptions for manufacturing use* by changing paragraph (a) to read:

(a) Except as provided by paragraphs (c) and (d) of this section, a shipment or other delivery of any certifiable antibiotic drug subject to the regulations in this chapter that is packed in containers of not less than 10,000,000 units of penicillin or 10 grams each of one of the other antibiotic drugs shall be exempt, during the time of introduction into and movement in interstate commerce and the time of holding in the establishment where it is so used, from the requirements of section 502(*l*) of the act, if it conforms to the standards prescribed therefor by the section of the regulations in this chapter which is specifically applicable to such other drug, if the label of each container bears the batch mark of the drug, the number of units or grams per package, and the date on which the latest assay of the drug was completed, and if the person who introduced each shipment or delivery into interstate commerce holds a permit from the Commissioner authorizing shipment for manufacturing use in such establishment.

6. It is proposed to amend § 146.24 as follows:

a. By changing the section heading and the introduction to the section to read:

§ 146.24 Antibiotic powders for diagnostic use.

Dry powders of antibiotic substances, with or without suitable buffer substances and diluents, packaged for dispensing and intended for use solely in laboratory procedures in connection with the diagnosis or treatment of disease and conspicuously so labeled shall be exempt from the certification requirements of sections 502(*l*) and 507 of the act if they comply with all the following conditions:

b. By changing paragraph (a) to read:

(a) The potency and moisture content of the antibiotic used in the manufacture of the powder and the moisture content of the powder comply with the standards prescribed for the antibiotic by the specific regulations issued in this chapter.

7. It is proposed to amend § 146.25 *Antibiotic drugs for use in medicated animal feed* * * * by changing the phrase "regulations in this chapter" in the introduction to the section to read: "regulations in Parts 146a, 146b, 146c, 146d, and 146e of this chapter".

8. It is proposed to amend Title 21 by adding thereto the following new parts:

PART 148—ANTIBIOTIC DRUGS SUBJECT TO CERTIFICATION UNDER THE DRUG AMENDMENTS OF 1962

Sec.
148.1 Definitions and interpretations.
148.2 Packaging requirements.
148.3 Labeling requirements.
148.4 Requests for certification; check tests and assays; samples.
148.5 Fees.

AUTHORITY: §§ 148.1 to 148.5 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148.1 Definitions and interpretations.

The definitions and interpretations of terms found in § 146.1 of this chapter apply also to this Part 148 and to Parts 148a–148z of this chapter.

§ 148.2 Packaging requirements.

Each drug described in Parts 148a to 148z, inclusive, of this chapter shall be packaged in immediate containers complying with the standards that the U.S.P. requires for containers used to package the same dosage form of a drug described in that compendium.

§ 148.3 Labeling requirements.

(a) If it is packaged for dispensing:

(1) It shall be labeled in accordance with the requirements prescribed by § 1.106(b) of this chapter, issued under section 502(f) of the act, unless the regulations pertaining to such drug specifically exempt it from such requirements.

(2) Its labeling shall bear any additional information required for the drug by specific regulations.

(3) Each package shall bear on its outside wrapper or container and the immediate container an expiration date prescribed for the drug by specific regulations, except that the date may be used that is 18, 24, 30, 36, 42, 48, 54, or 60 months after the month during which the batch was certified if the person who requests certification has submitted to the Commissioner results of tests and assays showing that such drug as prepared by him is stable for such period of time. If the manufacturer or repacker of the drug has been exempted from the certification requirements, such date shall be the number of months after the month during which the batch was last assayed and released by the manufacturer or repacker. If an expiration date is used that is longer than the minimum date provided for the drug by specific

regulations, it may be used only if the manufacturer has submitted information to the Commissioner adequate to prove that the drug is stable for such time.

(b) If it is packaged solely for manufacturing use or for repacking, each package shall bear on its outside wrapper or container and the immediate container, the following:

(1) The number of units or micrograms of activity per milligram or per gram, and the number of grams or kilograms in the immediate container.

(2) The batch mark.

(3) The statement "Caution: Federal law prohibits dispensing without prescription."

(4) The statement "For manufacturing use," "For repacking," or "For manufacturing use or repacking," and, if it is not sterile, the statement "nonsterile."

(5) The required expiration date.

§ 148.4 Requests for certification; check tests and assays; samples.

In addition to complying with the requirements of § 146.2 of this chapter, a person who requests certification or check tests and assays of a batch shall submit with his request the following information and samples:

(1) The batch mark of the drug.

(2) The quantity of each ingredient used in making the batch.

(3) The size of the batch, including the number of containers of each size in the batch.

(4) The date of the latest assay of the batch.

(5) The results of tests and assays made by or for him on the batch as required for the drug by specific regulations.

(6) The batch mark(s) of the antibiotic(s) used in making the batch.

(7) Unless previously submitted, the results of tests and assays made by or for him on the antibiotic(s) used in making the batch as required by specific regulations.

(8) The number of accurately representative samples that are required for the batch by specific regulations: In the case of drugs such as dry powders, solutions, ointments, and suspensions, the sample shall be collected by taking single immediate containers, before or after labeling, at such intervals throughout the entire time of packaging the batch that the quantities packaged during the intervals are approximately equal. In no case, however, shall more than 5,000 immediate containers have been packaged during each such interval of sampling, except for a sample collected for sterility testing. In the case of drugs such as tablets or other such unit dosage forms, the sample shall be collected by taking single tablets at such intervals throughout the entire time of tableting the batch that the quantities tableted during the intervals are approximately equal. In no case, however, shall more than 5,000 tablets have been tableted during each interval of sampling, except for a sample collected for time of disintegration. If the person who packages the tablets into dispensing-size containers is not the manufacturer, such sample shall be collected throughout the entire time of packaging the batch into such containers.

(9) Unless previously submitted, the number of accurately representative samples that are required for the antibiotic(s) used in making the batch by the regulations specifically relating to such drug.

(10) In connection with contemplated requests for certification of repacked batches or batches of another drug in the manufacture of which it is to be used, the manufacturer of a batch which is to be so repackaged or used may request the Commissioner to make check tests and assays on a representative sample of such batch. From the information submitted may be omitted results of tests and assays not required for the batch when used in such other drug. The Commissioner shall report to such manufacturer results of such check tests and assays as are so requested.

§ 148.5 Fees.

The fee for the services rendered with respect to each batch certified under the regulations in Parts 148a–148z, inclusive, of this chapter shall accompany the request for certification, or the request for check tests and assays, unless such fee is covered by an advance deposit maintained in accordance with § 146.8(d) of this chapter. Such fee shall be that required for the drug by the specific regulations, plus an additional 30 percent of whatever that fee may be. Also, if the Commissioner considers that investigations other than examination of such samples are necessary to determine whether or not such batch complies with the requirements of § 146.3 of this chapter for the issuance of a certificate, the fee shall include the cost of such investigations.

PART 148a—AMPHOMYCIN

Sec.
148a.1 Amphomycin calcium.
148a.2 Amphomycin calcium-neomycin sulfate cream.

AUTHORITY: §§ 148a.1 to 148a.2 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148a.1 Amphomycin calcium.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Amphomycin calcium is the calcium salt of amphomycin. It is so purified and dried that:

(i) Its potency is not less than 868 micrograms per milligram.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 10 percent.

(iv) Its pH in a 2 percent aqueous suspension is not less than 6.0 and not more than 7.5.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, and pH.

(ii) Samples required on the batch: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $4.00 for each immediate container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Cylinders (cups).* Use cylinders described in § 141a.1 of this chapter.

(ii) *Culture media.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F.

(*a*) Make nutrient agar for the base layer as follows:

Peptone	6.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 7.0 after sterilization.

(*b*) Make nutrient agar for the seed layer as follows:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Dextrose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 7.0 after sterilization.

In lieu of preparing the media from the individual ingredients specified in subsections (*a*) and (*b*) of this subdivision, they may be made from a dehydrated mixture which, when reconstituted with distilled water, has the same composition as such media. Minor modification of the individual ingredients specified in this subdivision are permissible if the resulting media possess growth-promoting properties at least equal to the media described.

(iii) *Preparation of suspension.* The test organism is *Micrococcus flavus* (ATCC 14452). Maintain this organism on slants of nutrient agar prepared as described in subdivision (ii)(b) of this subparagraph and to which has been added 1 milligram of neomycin sulfate per milliliter of agar. Wash the organism from the agar slant with 3 milliliters of sterile sodium chloride solution onto a large agar surface such as that provided by a Roux bottle containing 300 milliliters of the same type of agar used for the slants. Spread the suspension of organisms over the entire agar surface with the aid of sterile glass beads. Incubate for 24 hours at 32° C. to 35° C., and then wash the resulting growth from the agar surface with 50 milliliters of sterile sodium chloride solution. If an aliquot of this bulk suspension, when diluted 1:40 in the saline solution, gives 25 percent light transmission in a suitable photoelectric colorimeter with a 580-millimicron filter and a test tube with an inside diameter of 12 millimeters as an absorption cell, the bulk suspension is satisfactory for use. It may be necessary to adjust the bulk suspension by dilution, so that an aliquot of the adjusted suspension diluted 1:40 gives 25 percent light transmission. The adjusted bulk suspension, and not the 1:40 dilution of it, is used in preparing the seed layer. Add 0.3 milliliter of the adjusted bulk suspension to each 100 milliliters of seed agar, which has been melted and cooled to 48° C.

(iv) *Preparation of plates.* Add 21 milliliters of the base layer agar prepared as directed in subdivision (ii)(*a*) of this subparagraph to each Petri dish (20 millimeters x 100 millimeters). Distribute the agar evenly in the plates and allow it to harden. Use the plates the same day they are prepared. Add 4 milliliters of the inoculum prepared as described in subdivision (iii) of this subparagraph for each plate, tilting back and forth to spread the inoculated agar evenly over the surface. Place six cylinders on the inoculated agar surface so that they are at approximately 60° intervals on 2.8-centimeter radius.

(v) *Working standard.* Dry an appropriate amount of the working standard for 4 hours at 60° C. and a pressure of 5 millimeters of mercury or less. Determine the dry weight and dissolve the dried standard in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a stock standard solution of 1,000 micrograms per milliliter. Store this stock standard solution in a refrigerator, and use for no longer than 14 days.

(vi) *Standard curve.* Prepare the daily standard curve by further diluting the 1,000 microgram per milliliter stock standard solution in sufficient 0.1*M* potassium phosphate buffer, pH 8, to obtain concentrations of 4.0, 5.6, 8.0, 11.3, and 16.0 micrograms per milliliter. A total of 12 plates is used in the preparation of the standard curve, three plates for each solution except the 8.0 micrograms per milliliter solution. The latter concentration is used as the reference point and is included on each plate. On each of three plates fill three cylinders with the 8.0 micrograms per milliliter standard and the other three cylinders with the concentration under test. Thus, there will be thirty-six 8.0-microgram determinations and nine determinations for each of the other points on the curve. After the plates have incubated, read the diameters of the circles of inhibition. Average the readings of the 8.0 micrograms per milliliter concentration and the readings of the point tested for each set of three plates and average also all 36 readings of the 8.0 micrograms per milliliter concentration. The average of the 36 readings of the 8.0 micrograms per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 8.0 micrograms per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 5.6-microgram concentration the average reading of the 36 readings of the 8.0 micrograms per milliliter concentration is 16.5 millimeters and the average of the 8.0 micrograms per milliliter concentration of this set of three plates is 16.3 millimeters, the correction is +0.2 millimeter. If the average readings of the 5.6 micrograms per milliliter concentration of these same three plates is 15.9 millimeters, the corrected value is then 16.1 millimeters. Plot these corrected values, including the average of the 8.0 micrograms per milliliter concentration, on 2-cycle semilog paper using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points, either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L = Calculated zone diameter for the lowest concentration of the standard curve;

H = Calculated zone diameter for the highest concentration of the standard curve;

c = Average zone diameter of 36 readings of the 8.0 micrograms per milliliter standard;

a, b, d, e = Corrected average values for the 4.0, 5.6, 11.3, and 16.0 micrograms per milliliter standard solutions, respectively.

Plot the values obtained for L and H and connect with a straight line.

(vii) *Preparation of sample.* Dissolve the sample to be tested in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to make a convenient stock solution. Further dilute in buffer to a final concentration of 8.0 micrograms per milliliter (estimated).

(viii) *Plate assay.* Use three plates for each sample. Fill three cylinders on each plate with the 8.0 micrograms per milliliter standard and three cylinders with the 8.0 micrograms per milliliter (estimated) sample, alternating standard and sample. Incubate the plates for 16 hours to 18 hours at 32° C. to 35° C., and measure the diameter of each circle of inhibition. Average the zone readings of the standard and average the zone readings of the sample on the three plates used. If the sample gives a larger average zone size than the average of the standard, add the difference between them to the 8.0-microgram zone size of the standard curve. If the average sample value is lower than the standard value, subtract the difference between them from the 8.0-microgram value on the curve. From the curve, read the potencies corresponding to these corrected values.

(2) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using as a test dose 0.5 milliliter of a solution containing 1,000 micrograms per milliliter.

(3) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a suspension prepared by adding 20 milligrams per milliliter.

§ 148a.2 Amphomycin calcium-neomycin sulfate cream.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Amphomycin calcium-neomycin sulfate cream is amphomycin calcium and neomycin sulfate in a suitable and harmless water-soluble cream base. It may contain one or more suitable emulsifiers and preservatives. It may contain cortisone or a suitable derivative of cortisone. Each gram contains not less than 50 milligrams of amphomycin and the equivalent of not less than 3.3 milligrams of neomycin base. The amphomycin calcium used in making the cream conforms to the requirements prescribed by § 148a.1(a)(1). The neomycin sulfate used conforms to the requirements prescribed by § 148i.1(a)(1) of this chapter. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The amphomycin calcium used in making the batch for potency, moisture, pH, and identity.

(*b*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*c*) The batch for amphomycin potency and neomycin sulfate potency.

(ii) Samples required:

(*a*) Amphomycin calcium used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) Neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*c*) The batch: A minimum of 6 containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each immediate container in the samples submitted in accordance with subparagraph (3)(ii)(*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container in the sample submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Amphomycin content.* Proceed as directed in § 148a.1(b)(1), except in lieu of the directions in § 148.1(b)(1)(vii), prepare the sample as follows: Accurately weigh approximately 2 grams, and place in a blending jar containing 1.0 milliliter of polysorbate 80 and sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a final volume of 200 milliliters. Using a high-speed blender, blend the mixture for 2 minutes and then make the proper estimated dilutions using 0.1*M* potassium phosphate buffer, pH 8.0. Its content of amphomycin is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams per gram that it is represented to contain.

(2) *Neomycin content.* Blend the sample as described in subparagraph (1) of this paragraph and, making the proper estimated dilutions in pH 8.0 buffer, proceed as directed in § 148i.1(b)(1) of this chapter. Its content of neomycin is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams per gram that it is represented to contain.

PART 148b—AMPHOTERICIN

Sec.
148b.1 Amphotericin B.
148b.2 Amphotericin B. intravenous.

AUTHORITY: §§ 148b.1 to 148b.2 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148b.1 Amphotericin B.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Amphotericin B is a yellow to golden-orange powder. It is insoluble in water at pH. 6.0 to 7.0, anhydrous alcohols, esters, ethers, benzene, and toluene. It is soluble in dimethyl formamide and dimethyl sulfoxide. It is so purified and dried that:

(i) Its potency is not less than 750 micrograms per milligram on an anhydrous basis.

(ii) It contains not more than 15 percent of amphotericin A.

(iii) It is sterile.

(iv) It is nontoxic.

(v) It is nonpyrogenic.

(vi) It contains no histamine nor histamine-like substances.

(vii) Its moisture content is not more than 5.0 percent.

(viii) Its pH in a 3 percent aqueous suspension is not less than 6.0 and not more than 8.0.

(ix) It exhibits absorption maxima at 362, 381, and 405 millimicrons when dissolved in dimethyl sulfoxide and diluted with absolute methyl alcohol.

(2) *Labeling.* In addition to the labeling prescribed by § 148.3(b) of this chapter, each package shall bear on its label the statements "Store below 10° C." and "Protect from light and moisture." Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, amphotericin A content, sterility, toxicity, pyrogens, histamine, moisture, pH, and identity.

(ii) Samples required on the batch:

(*a*) For all tests except sterility: 10 packages, each containing not less than 500 milligrams.

(*b*) For sterility testing: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $10.00 for each package in the sample submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all packages in the sample submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Plate assay*—(*a*) *Cylinders (cups).* Use cylinders described in § 141a.1 of this chapter.

(*b*) *Culture media.* Use ingredients that conform to the standards, if any, prescribed by the U.S.P. or N.F.

(*1*) Make nutrient agar for preparing the inoculated agar plates as follows:

Peptone	9.4 gm.
Yeast extract	4.7 gm.
Beef extract	2.4 gm.
Sodium chloride	10.0 gm.
Dextrose	10.0 gm.
Agar	23.5 gm.
Distilled water, q.s.	1,000.0 ml.

pH 6.0 to 6.2 after sterilization.

(*2*) Make nutrient agar for carrying the organism as follows:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Dextrose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 6.5 to 6.6 after sterilization.

(*3*) Make nutrient broth for preparing an inoculum of the test organism:

Peptone	10.0 gm.
Dextrose	20.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 5.6 to 5.7 after sterilization.

In lieu of preparing the media from the individual ingredients as specified, they may be prepared from a dehydrated mixture which, when reconstituted with distilled water, has the same composition as such media. Minor modifications of the specified individual ingredients are permissible if the resulting media possess growth-promoting properties at least equal to the media described.

(*c*) *Working standard.* Dry approximately 30 milligrams of the amphotericin B working standard for 3 hours at 60° C. and a pressure of 5 millimeters or less. Determine the dry weight, and dissolve the dried standard in sufficient dimethyl sulfoxide to give a stock solution containing 1,000 micrograms per milliliter. This solution should be used for 1 day only.

(*d*) *Preparation of sample.* Dissolve the sample in sufficient dimethyl sulfoxide to give a convenient stock solution. Further dilute with dimethyl sulfoxide to a concentration of 20 micrograms per milliliter (estimated). Remove an aliquot and dilute to a concentration of 1.0 microgram per milliliter (estimated) using 0.2*M* potassium phosphate buffer, pH 10.5 (dipotassium phosphate, 35 grams; 10*N* sodium hydroxide, 2 milliliters). Make to 1 liter, using distilled water.

(*e*) *Test organism.* The test organism is Saccharomyces cerevisiae (ATCC 9763 or ATCC 2601 no vitamin requirement), which is maintained on slants of agar described in subsection (*b*)(*2*) of this subdivision and transferred once a week. After transfer, the culture is incubated at 37° C. for 24 hours and then kept refrigerated. Prepare the organism suspension by either of the following methods:

(*1*) Inoculate 100 milliliters of the broth medium described under subsection (*b*)(*3*) of this subdivision with a loopful of growth from the agar slant. Incubate the broth for 16 hours to 18 hours at 37° C. This broth culture may be used for several weeks if kept refrigerated.

(*2*) Wash the organism from the agar slant with 3 milliliters of sterile sodium chloride solution onto a large agar surface such as that provided by a Roux bottle containing 300 milliliters of the agar described in subsection (*b*)(*2*) of this subdivision. Spread the suspension of organisms over the entire agar surface with the aid of sterile glass beads. Incubate for 24 hours at 37° C., and then wash the resulting growth from the agar surface with about 30 milliliters of sterile sodium chloride solution. This suspension may be used for several weeks if kept refrigerated. Run test plates to determine the quantity of this broth culture (usually about 2.5 milliliters) or saline suspension (usually about 0.1 milliliter) that should be added to each 100 milliliters of agar to give clear, sharp inhibitory zones of appropriate size.

(*f*) *Preparation of plates.* Melt a sufficient amount of the agar described in subsection (*b*)(*1*) of this subdivision, cool to 48° C., add the proper amount of the test organism as described in subsection (*e*) of this subdivision, and mix thoroughly. Add 8 milliliters of this inoculated agar to each Petri dish (100 millimeters x 22 millimeters, with flat bottom). Distribute the agar evenly in the plates, cover with porcelain covers glazed on the outside, and allow to harden. After the agar has hardened, place 6 cylinders on the agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(*g*) *Standard curve.* Dilute aliquots of the working stock solution with dimethyl sulfoxide to give concentrations of 40.0, 28.4, 20.0, 14.2, and 10.0 micrograms per milliliter, respectively. Dilute one volume of each of these solutions with 19 volumes of potassium phosphate buffer, pH 10.5, to give final concentrations of 2.0, 1.42, 1.0, 0.71, and 0.5 microgram per milliliter. A total of 12 plates is used in the preparation of the standard curve, three plates for each solution, except the 1.0 microgram per milliliter solution. The latter concentration is used as the reference point and is included on each plate. On each of the three plates fill three cylinders with the 1.0 microgram per milliliter standard and the other three cylinders with the concentration of the standard concentration under test. Thus, there will be thirty-six 1.0-microgram determinations and nine determinations for each of the other concentrations on the curve. Incubate the plates for 16 hours to 18 hours at 37° C., and measure the diameter of each zone of inhibition. Average the readings of the 1.0 microgram per milliliter concentration and the readings of the concentration tested for each set of three plates, and average also all 36 readings of the 1.0 microgram per milliliter concentration. The average of the 36 readings of the 1.0 microgram per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 1.0 microgram per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 0.71 microgram per milliliter concentration the average of the 36 readings of the 1.0 microgram per milliliter concentration is 16.0 millimeters and the average of the 1.0 microgram per milliliter concentration of this set of three plates is 15.8 millimeters, the correction is +0.2 millimeter. If the average reading of the 0.71 microgram per milliliter concentration of these same three plates is 15.0 millimeters, the corrected value is then 15.2 millimeters. Plot these corrected values, including the average of the 1.0 microgram per milliliter concentration on two-cycle semilog paper, using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points.

(*h*) *Assay*. Use three plates for each sample. Fill three cylinders on each plate with the 1.0 microgram per milliliter standard and three cylinders with the 1.0 microgram per milliliter (estimated) sample, alternating standard and sample. Incubate the plates for 16 hours to 18 hours at 37° C., and then measure the diameter of each zone of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the 1.0 microgram per milliliter zone on the standard curve. If the average value is lower than the standard value, subtract the difference between them from the 1.0 microgram per milliliter value on the curve. From the curves read the potencies corresponding to these corrected values of zone sizes.

(ii) *Turbidimetric assay*—(a) *Culture media*. Use ingredients that conform to the standards, if any, prescribed by the U.S.P. or N.F.

(*1*) Make yeast-beef agar for carrying the organism as follows:

Peptone	6.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Dextrose	1.0 gm.
Agar	15.0 gm.
Distilled water to make	1,000.0 ml.

pH 6.6 after sterilization.

(*2*) Make yeast-beef broth for preparing an inoculum of the test organism:

Beef extract	1.5 gm.
Yeast extract	6.5 gm.
Peptone	5.0 gm.
Trypton	10.0 gm.
Dextrose	11.0 gm.
Sodium chloride	3.5 gm.
Dipotassium phosphate	3.68 gm.
Monopotassium phosphate	1.32 gm.
Distilled water to make	1,000.0 ml.

pH 6.6 after sterilization.

(*3*) Make yeast-beef assay broth:

Beef extract	1.5 gm.
Yeast extract	1.5 gm.
Peptone	5.0 gm.
Dextrose	11.0 gm.
Sodium chloride	3.5 gm.
Dipotassium phosphate	3.68 gm.
Monopotassium phosphate	1.32 gm.
Distilled water to make	1,000.0 ml.

pH 6.6 after sterilization.

In lieu of preparing the media from the individual ingredients as specified, they may be prepared from a dehydrated mixture which, when reconstituted with distilled water, has the same composition as such media. Minor modifications of the specified individual ingredients are permissible if the resulting media possess growth-promoting properties at least equal to the media described.

(*b*) *Working standard and standard solutions*. Use the working standard described in subdivision (i)(*c*) of this subparagraph. Dissolve in dimethyl sulfoxide to obtain a concentration of 2 milligrams per milliliter. Further dilute to obtain a concentration of 30 micrograms per milliliter, using 25 percent dimethyl sulfoxide (one part dimethyl sulfoxide plus three parts distilled water). Use 1 percent potassium phosphate buffer, pH 6.0, and dilute to a concentration of 1 microgram per milliliter. Further dilute this solution with distilled water, and prepare the standard curve containing concentrations of 0.032, 0.04, 0.05, 0.0625, and 0.0781 microgram per milliliter. Add 1.0 milliliter of each concentration to each of six sterile 20 millimeters x 150 millimeters test tubes.

(*c*) *Preparation of sample*. Prepare the sample to be tested, using the same procedure as described for the standard solutions, obtaining six tubes each containing 1.0 milliliter of a solution containing 0.05 microgram per milliliter (estimated).

(*d*) *Preparation of test organism*. The test organism is Candida tropicalis (ATCC 13803), which is maintained on slants of agar described in (*a*)(*1*) of this subdivision. Prepare the daily inoculum by transferring the culture from a stock slant to 100 milliliters of the broth described in (*a*)(*2*) of this subdivision, and incubate for 16 hours to 18 hours at 30° C., with constant shaking. Prepare the daily inoculated assay broth by adding from 3 milliliters to 5 milliliters of a fresh 16 hour to 18 hour broth culture to each liter of assay broth, prepared as directed in (*a*)(*2*) of this subdivision, needed for the test.

(*e*) *Procedure*. To each of the 20 millimeters x 150 millimeters test tubes prepared in (*b*) and (*c*) of this subdivision, add 9.0 milliliters of the inoculated assay broth described in subsection (*d*) of this subdivision, and incubate all standard and sample tubes at 30° C., with constant shaking, for 3 to 5 hours. After incubation, add 0.5 milliliter of a 12 percent formaldehyde solution to each tube, and read the absorbance values in a suitable photoelectric colorimeter, using a wavelength of 530 millimicrons. Set the instrument at zero absorbance with clear uninoculated broth prepared as described in (ii)(*a*)(*2*) of this subdivision.

(f) *Estimation of potency*. Plot the average values for each concentration of the standard on semilog graph paper with absorbance values on the arithmetic scale and amphotericin concentrations on the logarithmic scale. Construct the best straight line through the points, either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L = Absorbance value for the lowest concentration of the standard curve;

H = Absorbance value for the highest concentration of the standard curve;

a, b, c, d, e = Average absorbance values for each concentration of the standard curve.

Plot the values obtained for L and H and connect the points with a straight line. Average the absorbance values for the sample and read the amphotericin concentration from the standard curve. Multiply the concentration by appropriate dilution factors to obtain the amphotericin content of the sample.

(2) *Amphotericin A content*—(i) *Amphotericin A*. Accurately weigh about 20 milligrams of the amphotericin A working standard into a 200-milliliter volumetric flask. Add exactly 20.0 milliliters of dimethyl sulfoxide and dissolve. Make to mark with methyl alcohol, and mix thoroughly. Pipette 4.0 milliliters of this solution into a 50-milliliter volumetric flask. Add methyl alcohol to mark, and mix thoroughly.

(ii) *Amphotericin B*. Accurately weigh about 50 milligrams of the amphotericin B working standard into a 50-milliliter volumetric flask and proceed as directed in subdivision (i) of this subparagraph.

(iii) *Sample*. Accurately weigh about 50 milligrams of the sample to be tested, and proceed as directed in subdivision (i) of this subparagraph. The standards should be used for 1 day only.

(iv) *Blank*. Pipette 5.0 milliliters of dimethyl sulfoxide into a 50-milliliter volumetric flask. Make to mark with methyl alcohol, and mix. Pipette 4.0 milliliters of this solution into a 50-milliliter volumetric flask. Make to mark with methyl alcohol, and mix thoroughly.

(v) *Procedure*. Use a suitable ultraviolet spectrophotometer and 1-centimeter silica cells. Adjust the instrument to zero with the blank solution. Measure the absorbances of the solutions of standard A, standard B, and the sample at 304 millimicrons and at 282 millimicrons. Calculate the absorptivity of each standard at both wavelengths:

Percent amphotericin A

$$=\frac{[(B\times S_2)-(b\times S_1)]\times 625}{\text{Weight of sample in grams}\times[(B\times a)-(B\times A)]},$$

where:

A = Absorptivity of amphotericin A standard at 282 millimicrons;

B = Absorptivity of amphotericin B standard at 282 millimicrons;

a = Absorptivity of amphotericin A standard at 304 millimicrons;

b = Absorptivity of amphotericin B standard at 304 millimicrons;

S_1 = Absorbance of sample at 282 millimicrons;

S_2 = Absorbance of sample at 304 millimicrons.

(3) *Sterility*. Proceed as directed in § 141a.2 of this chapter using approximately 500 milligrams from each container tested, except that neither penicillinase nor the control tube is used in the test for bacteria.

(4) *Toxicity*. Proceed as directed in § 141a.4 of this chapter, except administer orally by means of a cannula or other suitable device, to each of 5 mice, 0.4 milliliter of a suspension of the drug containing 50 milligrams per milliliter in 0.5 percent gum acacia solution.

(5) *Pyrogens*. Proceed as directed in § 141a.3 of this chapter, using as a test dose 0.5 milliliter per kilogram, of an

aqueous solution containing 2 milligrams of activity per milliliter. If no rabbit shows an individual rise in temperature of 1.1° C. or more above its respective control temperature, and if the sum of the three temperature rises does not exceed 3° C., the material under examination meets the requirements for the absence of pyrogen. If one or two rabbits show a temperature rise of 1.1° C. or more, or if the sum of the temperature rises exceeds 3.0° C., repeat the test, using five other rabbits. If not more than three of the eight rabbits show an individual rise in temperature of 1.1° C. or more, and if the sum of the eight temperature rises does not exceed 8.0° C., the material under examination meets the requirements for the absence of pyrogen.

(6) *Histamine.* Using as a test dose 0.6 milliliter per kilogram of a sterile saline solution containing 5.0 milligrams per milliliter, proceed as directed in § 141b.105 of this chapter.

(7) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(8) *pH.* Using a 3.0 percent aqueous suspension, proceed as directed in § 141a.5(b) of this chapter.

(9) *Identity.* Accurately weigh 50.0 milligrams of the sample into a dry 50-milliliter volumetric flask. Add exactly 5 milliliters of dimethyl sulfoxide and dissolve. Make to mark with methyl alcohol, and mix thoroughly. Pipette 4 milliliters of this solution into a 50-milliliter volumetric flask. Add methyl alcohol to the mark, and mix thoroughly. The sample has absorption peaks at identical wavelengths with that of the standard (272, 282, 295, 362, 381, and 405 millimicrons).

§ 148b.2 Amphotericin B intravenous.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Amphotericin B intravenous is a dry powder composed of amphotericin B and sodium desoxycholate and one or more suitable buffering substances. It contains the equivalent of not less than 50 milligrams of amphotericin B. It is sterile. It is nontoxic. It is nonpyrogenic. It contains no histamine nor histamine-like substances. Its moisture content is not more than 8.0 percent. Its pH in an aqueous solution containing 10 milligrams of activity per milliliter is not less than 7.2 and not more than 8.0. The amphotericin B used conforms to the requirements of § 148b.1(a)(1), except that its amphotericin A content is not more than 5 percent. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* In addition to the labeling requirements prescribed by § 148.3 of this chapter, each package shall bear on its label or labeling the following statement: "For intravenous infusion in hospitals only." Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The amphotericin B used in making the batch for potency, amphotericin A content, and identity.

(*b*) The batch for potency, sterility, toxicity, pyrogens, histamine, moisture, and pH.

(ii) Samples required:

(*a*) Amphotericin B used in making the batch: 10 packages, each containing approximately equal portions of not less than 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: A minimum of 10 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*3*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii)(*a*) and (*b*) (*1*) and (*3*) of this paragraph; $10.00 for all immediate containers in the samples submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Dilute the sample in sufficient dimethyl sulfoxide to give a convenient stock solution, and proceed as directed in §148b.1(b)(1). Its potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Sterility.* Proceed as directed in §141a.2 of this chapter, using the entire contents of each container tested, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using a test dose of 0.3 milliliter of an aqueous solution containing 50 micrograms of activity per milliliter.

(4) *Pyrogens.* Proceed as directed in § 148b.1(b)(5).

(5) *Histamine.* Proceed as directed in § 148b.1(b)(6).

(6) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using an aqueous solution containing 10 milligrams of activity per milliliter.

PART 148c—COLISTIN SULFATE

Sec.

148c.1 Colistin sulfate.
148c.2 Colistin sulfate-neomycin sulfate otic solution.
148c.3 Colistin sulfate for oral suspension.
148c.4 Colistin methane sulfonate sodium.

AUTHORITY: §§ 148c.1 to 148c.4 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148c.1 Colistin sulfate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Colistin sulfate is the white to slightly yellow, odorless sulfate salt of a kind of colistin or a mixture of two or more such salts. It is so purified and dried that:

(i) Its potency is not less than 500 micrograms per milligram.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 7.0 percent.

(iv) Its pH in an aqueous solution containing 10 milligrams per milliliter is not less than 4.0 and not more than 7.0.

(v) It gives a positive identity test for colistin.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b). Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4, of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, pH, and identity.

(ii) Samples required on the batch: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $4.00 for each immediate container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Cylinders (cups).* Use cylinders described in § 141a.1(a) of this chapter.

(ii) *Culture media.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F.

(*a*) Nutrient agar for the base layer and for preparing the inoculated agar plates as follows:

	Base layer	*Seed layer*
Pancreatic digest of casein	17.0 gm.	17.0 gm.
Papaic digest of soybean	3.0 gm.	3.0 gm.
Sodium chloride	5.0 gm.	5.0 gm.
Dextrose	2.5 gm.	2.5 gm.
Dibasic potassium phosphate	2.5 gm.	2.5 gm.
Polysorbate 80	------	10.0 ml.
Agar	20.0 gm.	12.0 gm.
Distilled water to make	1,000.0 ml.	1,000.0 ml.
Final pH (after sterilization)	7.2–7.3	7.2–7.3

(*b*) Make nutrient agar for carrying the organism as follows:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Glucose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s	1,000.0 ml.

pH 6.5–6.6 after sterilization.

In lieu of preparing the medium from the individual ingredients specified, it can be made from a dehydrated mixture that, when reconstituted with distilled water, has the same composition as such medium. Minor modifications of the specified individual ingredients are permissible if the resulting medium possesses growth-promoting properties at least equal to the medium described.

(iii) *Preparation of test organism.* The test organism used is Bordetella bronchiseptica (ATCC 4617), and it is maintained on the nutrient agar described in subdivision (ii)(*a*) of this subparagraph. Inoculate a Roux bottle containing 300 milliliters of this agar from a stock slant and incubate 24 hours at 32° C.–35° C. Wash the resulting growth with 50 milliliters of sterile sodium chloride solution and standardize the organism suspension so that a 1:20 dilution in saline will give 25 percent light transmission, using a filter having a wavelength of 580 millimicrons. Use 0.3 milliliter of this standardized bacterial suspension (not the 1:20 dilution) to inoculate each 100 milliliters of melted seed layer agar (cooled to 48° C.–50° C.).

(iv) *Preparation of plates.* Use plates the same day they are prepared. Evenly distribute 21.0 milliliters of the melted base layer agar on each Petri dish (20 millimeters x 100 millimeters); cover with porcelain tops, glazed on the outside, and allow the agar to harden. Evenly spread 4.0 milliliters of the inoculated seed layer agar over the surface of the plate. After the seed layer has hardened, placed six cylinders on the inoculated agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(v) *Working standard.* Dry an appropriate amount of the working standard for 3 hours at 60°C. and a pressure of 5 millimeters or less. Determine the dry weight and prepare a stock solution of 1,000 micrograms per milliliter by diluting this dried working standard with sterile 10 percent potassium phosphate buffer, pH 6.0.

(vi) *Standard curve.* Prepare concentrations for the standard curve by diluting the working standard stock solution (1,000 micrograms per milliliter) with sterile 10 percent potassium phosphate buffer, pH 6.0, to give final concentrations of 0.64, 0.80, 1.0, 1.25, and 1.56 micrograms per milliliter. A total of 12 plates is used in the preparation of the standard curve, three plates for each solution, except the 1.0 microgram per milliliter solution. The latter concentration is used as the reference point and is included on each plate. On each of the three plates fill three cylinders with the 1.0 microgram per milliliter standard and the other three cylinders with the concentration of the standard concentration under test. Thus, there will be 36 one-microgram determinations and nine determinations for each of the other concentrations on the curve. Incubate the plates for 16 hours to 18 hours at 37° C. and measure the diameter of each zone of inhibition. Average the readings of the 1.0 microgram per milliliter concentration and the readings of the concentration tested for each set of three plates, and average also all 36 readings of the 1.0 microgram per milliliter concentration. The average of the 36 readings of the 1.0 microgram per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 1.0 microgram per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 1.25 microgram per milliliter concentration the average of the 36 readings of the 1.0 microgram per milliliter concentration is 18.0 milliliters, and the average of the 1.0 microgram per milliliter concentration of this set of three plates is 17.8 millimeters, the correction is +0.2 millimeter. If the average reading of the 1.25 microgram per milliliter concentration of those same three plates is 19.6 millimeters, the corrected value is then 19.8 millimeters. Plot these corrected values, including the average of the 1.0 microgram per milliliter concentration, on two-cycle semilog paper, using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points.

(vii) *Preparation of sample.* Dissolve an accurately weighed quantity of the sample in sufficient 10 percent potassium phosphate buffer, pH 6.0, to give a convenient stock solution. Further dilute in the same buffer to obtain an estimated concentration of 1.0 microgram per milliliter.

(viii) *Assay.* Use three plates for each sample. Fill three cylinders on each plate with the 1.0 microgram per milliliter standard and three cylinders with the 1.0 microgram per milliliter (estimated) sample, alternating standard and sample. Incubate the plates for 16 hours to 18 hours at 37° C. and then measure the diameter of each zone of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the 1.0 microgram per milliliter zone on the standard curve. If the average value is lower than the standard value, subtract the difference between them from the 1.0 microgram per milliliter value on the curve. From the curve, read the potencies corresponding to these corrected values of zone sizes.

(2) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using a test dose of 0.5 milliliter of a sterile distilled water solution containing 600 micrograms of colistin sulfate activity per milliliter.

(3) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter, using a sample of about 300 milligrams.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using an aqueous solution containing 10 milligrams per milliliter.

(5) *Identity.* Weigh about 20 milligrams of sample, add 2 milliliters of 2.5 percent sodium acetate solution and 0.2 milliliter of 0.5 percent triketohydrindene hydrate solution, and bring to boil. A deep-purple color results.

§ 148c.2 Colistin sulfate-neomycin sulfate otic solution with hydrocortisone.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Colistin sulfate-neomycin sulfate otic solution with hydrocortisone is colistin sulfate, neomycin sulfate, hydrocortisone, and one or more buffer substances and dispersing agents, dissolved in a suitable and harmless vehicle. Each milliliter contains not less than 3.0 milligrams of colistin base activity (as the sulfate) and not less than 3.3 milligrams of neomycin base activity (as the sulfate). Its pH is not less than 4.8 and not more than 5.2. The colistin sulfate used conforms to the standards prescribed therefor by § 148c.1(a)(1), except for toxicity. The neomycin sulfate used conforms to the standards prescribed by § 148i.1(a)(1) of this chapter, except for sterility, pyrogens, toxicity and histamine. Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The colistin sulfate used in making the batch for potency, moisture, pH, and identity.

(*b*) The neomycin sulfate used in making the batch for potency, moisture, pH, and identity.

(*c*) The batch for colistin potency, neomycin potency, and pH.

(ii) Samples required:

(*a*) The colistin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The neomycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*c*) The batch: A minimum of seven immediate containers.

(*d*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each immediate container in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*), and (*d*) of this paragraph; $5.00 for each immediate container in the sample submitted in accordance with subparagraph (3)(ii)(*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Colistin content.* Proceed as directed in § 148c.1(b)(1), except prepare the sample as follows: Thoroughly mix the sample and transfer an accurately measured aliquot of the sample into a 100-milliliter volumetric flask. Fill the flask to mark with 10 percent potassium phosphate buffer, pH 6.0. Further dilute to the proper estimated concentration in 10 percent potassium phosphate buffer, pH 6.0. The average potency is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams per milliliter that it is represented to contain.

(2) *Neomycin content.* Proceed as directed in § 148i.1(b)(1) of this chapter, except prepare the sample as follows: Thoroughly mix the sample and transfer an accurately measured aliquot to a 100-milliliter volumetric flask. Fill to mark with 0.1*M* potassium phosphate buffer, pH 8.0. Further dilute to the proper estimated concentration in pH 8.0 buffer. The average potency is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams per milliliter that it is represented to contain.

(3) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using the undiluted solution or suspension.

§ 148c.3 Colistin sulfate for oral suspension.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Colistin sulfate for oral suspension is a dry mixture of colistin sulfate, with or without one or more suitable and harmless buffer substances, suspending and dispersing agents, diluents, colorings, and flavorings. The colistin sulfate content is not less than 5.0 milligrams per milliliter of the reconstituted suspension. The moisture content is not more than 3.0 percent. The colistin sulfate used conforms to the standards prescribed by § 148c.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled as prescribed in § 148.3, of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirments of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The colistin sulfate used in making the batch for potency, toxicity, pH, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) The colistin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: A minimum of 6 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing not less than approximately 5 grams.

(4) *Fees.* $4.00 for each container submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148c.1 (b)(1), except prepare the sample as follows: Reconstitute the suspension as directed in the label. Dissolve and further dilute 5 milliliters of the reconstituted suspension in 1.0 percent potassium phosphate buffer, pH 6.0.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

§ 148c.4 Colistin methane sulfonate sodium.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Colistin methane sulfonate sodium is a white to slightly yellowish-brown methane sulfonate sodium salt of a kind of colistin, or a mixture of two or more such salts. It is so purified and dried that:

(i) Its potency is not less than 300 micrograms of colistin base per milligram.

(ii) It is sterile.

(iii) It is nontoxic.

(iv) It is nonpyrogenic.

(v) It contains no histamine or histamine-like substances.

(vi) Its moisture content is not more than 9.0 percent.

(vii) Its pH in an aqueous solution containing 10 milligrams per milliliter is not less than 7.0 and not more than 9.5.

(viii) It gives a positive identity test for colistin methane sulfonate.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, sterility, toxicity, pyrogens, histamine, moisture, pH, and identity.

(ii) Samples required:

(*a*) For all tests except sterility: 10 containers, each containing not less than 500 milligrams.

(*b*) For sterility testing: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $10.00 for each container in the sample submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all containers submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148c.1 (b)(1) of this chapter.

(2) *Sterility.* Use the entire contents of a container or the equivalent of approximately 500 milligrams of colistin sulfate activity from each large container and proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using a test dose of 1.0 milliliter per kilogram of a solution in sterile, pyrogen-free distilled water, containing 10 milligrams of colistin sulfate activity per milliliter.

(4) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using a test dose of 0.5 milliliter of a solution in sterile distilled water containing 1.5 milligrams of colistin sulfate activity per milliliter.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, using a test dose of 1 milliliter per kilogram of a solution containing 3.0 milligrams of colistin base per milliliter.

(6) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter, using a sample of not less than 100 milligrams.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a solution of 10 milligrams per milliliter.

(8) *Identity.* To about 20 milligrams of sample add 2 milliliters of 2.5 percent sodium acetate solution and 0.2 milliliter of 0.5 percent triketohydrindene hydrate solution. Bring to boil. No pink color results. To about 20 milligrams of sample add 2 milliliters of dilute hydrochloric acid. Reflux for about 2 minutes, neutralize with 10 percent sodium hydroxide, and add sodium acetate. A deep-purple color results.

PART 148d—CYCLOSERINE

Sec.

148d.1 Cycloserine.
148d.2 Cycloserine capsules.
148d.3 Cycloserine capsules with isoniazid.

AUTHORITY: §§ 148d.1 to 148d.3 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148d.1 Cycloserine.

(a) *Requirements for certification* —(1) *Standards of identity, strength, quality, and purity.* Cycloserine is a white to slightly yellowish crystalline compound. It has the chemical structure D-4-amino-3-isoxazolidone. It is so purified that:

(i) Its potency is not less than 900 micrograms per milligram.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 1.0 percent.

(iv) Its pH in a 10 percent aqueous solution is not less than 5.5 and not more than 6.5.

(v) Its heavy metals content is not more than 30 parts per million.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency (chemical and biological), toxicity, moisture, pH, crystallinity, and heavy metals.

(ii) Samples of the batch: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Colorimetric assay*—(*a*) *Stock standard solution.* Dry approximately 100 milligrams of the working standard for 3 hours at 60° C. and a pressure of 5 millimeters or less. Determine the dry weight and dissolve the dried working standard in sufficient 0.1*N* sodium hydroxide to give a solution containing 1,000 micrograms per milliliter.

(*b*) *Standard curve solutions.* Pipette accurately 0.0, 1.0, 5.0, 10.0, 15.0, and 20.0 milliliters of the stock standard solution to each of six 100-milliliter volumetric flasks, dilute to 100 milliliters with 0.1*N* sodium hydroxide and mix thoroughly.

(*c*) Reagents:

(*1*) Acetic acid—1.0*N* solution.

(*2*) Sodium hydroxide—4.0*N* and 0.1*N* solutions.

(*3*) Sodium nitroprusside—4.0 percent solution: Dissolve 4.0 grams in sufficient distilled water to make 100.0 milliliters. Mix well. Store in amber bottle.

(*4*) Oxidized nitroprusside reagent—Mix equal parts of 4 percent sodium nitroprusside solution and 4.0*N* sodium hydroxide, and let stand for 1 hour before using. Prepare daily, and store in an amber bottle.

(*d*) *Procedure.* Transfer approximately 100 milligrams of sample, accurately weighed, to a 100-milliliter volumetric flask. Dissolve in sufficient 0.1*N* sodium hydroxide to measure exactly 100 milliliters. Mix thoroughly and transfer 10 milliliters to a second 100-milliliter volumetric flask, and mix thoroughly. Transfer exactly 1.0 milliliter of each of the standard curve solutions and of the sample solution to respective test tubes. Add exactly 3.0 milliliters of 1.0*N* acetic acid to each of the test tubes. Mix thoroughly. Add exactly 1.0 milliliter of oxidized nitroprusside reagent to each test tube and mix thoroughly. Allow the tubes to stand at room temperature for at least 10 minutes in order that maximum color intensity may develop. Using the solution containing 0.0 milliliter of working standard as a blank, determine the absorbances of the solutions at 625 millimicrons in a suitable spectrophotometer. Plot concentration versus absorbance on linear graph paper. The curve may deviate slightly from a straight line. The standard curve solutions equal 0, 10, 50, 100, 150, and 200 micrograms of cycloserine, respectively.

(*e*) Calculations:

$$\text{Micrograms cycloserine per milligram} = \frac{\text{Concentration in micrograms from calibration curve} \times 1{,}000}{\text{Weight of original sample in milligrams}}.$$

(ii) *Plate assay*—(*a*) *Cylinders* (*cups*). Use cylinders described in § 141a.1(a) of this chapter.

(*b*) *Culture media.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F.

(*1*) Base layer agar:

Peptone	6.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 6.5 to 6.6 after sterilization.

(*2*) Seed layer agar (also used for maintaining test organism):

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Dextrose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 6.5 to 6.6 after sterilization.

In lieu of preparing the medium from the individual ingredients specified, it can be made from a dehydrated mixture that, when reconstituted with distilled water, has the same composition as such medium.

(*c*) *Preparation of test organism.* The test organism used is Staphylococcus aureus (ATCC 6538). Incubate a seed agar slant which has been streaked with the organism, for 24 hours at 32° C.–35° C. Wash the slant with 3 milliliters of sterile sodium chloride solution with the aid of glass beads onto a Roux bottle containing 300 milliliters of seed agar. Incubate for 24 hours at 32° C.–35° C., and wash with 50 milliliters of sterile sodium chloride solution into an Erlenmeyer flask. Using a suitable photoelectric colorimeter with a filter having a wavelength of 580 millimicrons, adjust the suspension so that a 1:20 dilution with saline will give 25 percent light transmission. Determine by test plates the amount of inoculum to be added to the seed layer to obtain satisfactory zones (usually 2 percent of a 1:50 dilution).

(*d*) *Preparation of plates.* Use plates the same day they are prepared. Evenly distribute 10.0 milliliters of the melted base layer agar on each Petri dish (20 millimeters x 100 millimeters); cover with porcelain tops, glazed on the outside, and allow the agar to harden. Evenly spread 4.0 milliliters of the inoculated seed layer agar over the surface of the plate. After the seed layer has hardened, place six cylinders on the inoculated agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(*e*) *Standard.* Dry an appropriate amount of the working standard for 3 hours at 60° C. with a pressure of 5 millimeters or less. Determine the dry weight and dissolve the dried working standard in sufficient distilled water to obtain a stock solution of 1,000 micrograms per milliliter.

(*f*) *Standard curve.* Prepare concentrations for the standard curve by diluting the working standard stock solution (1,000 micrograms per milliliter) in 1 percent potassium phosphate buffer, pH 6.0, to give final concentrations of 32, 40, 50, 62.5, and 78.1 micrograms per milliliter. A total of 12 plates is used in the preparation of the standard curve, three plates for each solution, except the 50 micrograms per milliliter solution. The latter concentration is used as the reference point and is included on each plate. On each of the three plates fill three cylinders with 50 micrograms per milliliter standard and the other three cylinders with the concentration of the standard concentration under test. Thus, there will be thirty-six 50-microgram determinations and nine determinations for each of the other concentrations on the curve. Incubate the plates for 16 hours to 18 hours at 30° C., and measure the diameter of each zone of inhibition. Average the readings of the 50 micrograms per milliliter concentration and the readings of the concentration tested for each set of three plates, and average also all 36 readings of the 50 micrograms per milliliter concentration. The average of the 36 readings of the 50 micrograms per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 50 micrograms per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 62.5 micrograms per milliliter concentration the average of the 36 readings of the 50 micrograms per milliliter concentration is 18.0 millimeters and the average of the 50 micrograms per milliliter concentration of this set of three plates is 17.8 millimeters, the correction is +0.2 millimeter. If the average reading of the 62.5 micrograms per milliliter concentration of those same three plates is 19.6 millimeters, the corrected value is then 19.8 millimeters. Plot these corrected values, including the average of the 50 micrograms per milliliter concentration, on two-cycle semilog paper, using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points.

(*g*) *Preparation of sample.* Dissolve an accurately weighed quantity of the sample in 1 percent potassium phosphate buffer, pH 6.0, to an estimated concentration of 50 micrograms per milliliter.

(*h*) *Assay.* Use three plates for each sample. Fill three cylinders on each plate with the 50 micrograms per milliliter standard and three cylinders with the 50 micrograms per milliliter (estimated) sample, alternating standard and sample. Incubate the plates for 16 hours to 18 hours at 30° C. and then measure the diameter of each zone of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the 50 micrograms per milliliter zone on the standard curve. If the average value is lower than the standard value, subtract the difference between them from the 50 micrograms per milliliter value on the curve. From the curves, read the potencies corresponding to these corrected values of zone sizes.

(2) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using a test dose of 0.5 milliliter of a solution in sterile distilled water containing 32 milligrams per milliliter.

(3) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(4) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a solution with a concentration of 100 milligrams per milliliter.

(5) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

(6) *Heavy metals*—(i) *Reagents*—(*a*) Nitric acid.

(*b*) Sulfuric acid.

(*c*) Hydrochloric acid.

(*d*) Ammonia test solution: Each 100 milliliters of solution contains 9.5 percent to 10.5 percent ammonia.

(*e*) 10 percent acetic acid.

(*f*) Saturated hydrogen sulfide solution, made by passing hydrogen sulfide into cold water.

(*g*) Lead nitrate stock solution: Dissolve 159.8 milligrams of lead nitrate in 10 milliliters of water to which has been added 1.0 milliliter of nitric acid, then dilute with water to 1,000 milliliters. Prepare and store this solution in glass containers free from soluble lead salts.

(*h*) Standard lead solution: Dilute 10 milliliters of lead nitrate stock solution, accurately measured, with water to 100 milliliters. This solution must be freshly prepared. Each milliliter of standard lead solution contains the equivalent of 0.01 milligram of lead. When 0.1 milliliter of standard lead solution is employed to prepare the standard to be compared with a solution of 1.0 gram of the substance being tested, the comparison solution thus prepared contains the equivalent of 1 part of lead per million parts of the substance tested.

(ii) *Procedure.* Transfer 1.0 gram of sample to a porcelain crucible, carefully ignite at a low temperature until thoroughly charred, add 2 milliliters of nitric acid, 5 drops of sulfuric acid, and cautiously heat until white fumes are evolved. Then ignite in a muffle furnace at 500° C. to 600° C. until the carbon is consumed. Cool, add 2 milliliters of hydrochloric acid, and slowly evaporate on a steam bath to dryness. Moisten the residue with 1 drop of hydrochlorid acid, add 10 milliliters of hot water, and digest for 2 minutes. Add, dropwise, ammonia test solution until the solution is just alkaline to litmus paper; then add dropwise, 10 percent acetic acid until the solution is slightly acid to litmus, and then add 2 milliliters in excess. Filter, if necessary; wash the crucible and filter with about 10 milliliters of water and dilute to 25 milliliters. Transfer to a Nessler tube and add 10 milliliters of saturated hydrogen sulfide solution. The color is no darker than that of a control containing, in the same volume, 3.0 milliliters of standard lead solution, 2 milliliters of 10 percent acetic acid, and 10 milliliters of saturated hydrogen sulfide solution.

§ 148d.2 Cycloserine capsules.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Cycloserine capsules are capsules composed of crystalline cycloserine, with or without one or more suitable and harmless buffer substances, diluents, binders, and lubricants. Each capsule contains not less than 250 milligrams of cycloserine. The moisture content is not more than 1.0 percent. The cycloserine used conforms to the requirements prescribed by § 148d.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* In addition to the labeling prescribed by § 148.3 of this chapter, the labeling of each package shall bear a warning to the effect that the drug is to be used in patients with tuberculosis who fail to respond to treatment with isoniazid, streptomycin, para-aminosalicylic acid, viomycin, pyrazinamide, or combinations of these drugs, and that the drug may cause serious reactions such as convulsive seizures and mental disturbances. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) Cycloserine used in making the batch for potency (chemical and biological), toxicity, pH, crystallinity, and heavy metals.

(*b*) The batch for potency (chemical and biological), and moisture.

(ii) Samples required:

(*a*) Cycloserine used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: Minimum of 30 capsules.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each, containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the samples submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph; $1.00 for each capsule in the sample submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Chemical colorimetric assay.* (*a*) Reagents:

(*1*) Acetic acid—1.0*N* solution.

(*2*) Sodium hydroxide—4.0*N* and 0.1*N* solutions.

(*3*) Sodium nitroprusside—4.0 percent solution: Dissolve 4.0 grams in sufficient distilled water to make 100.0 milliliters. Mix well. Store in amber bottle.

(*4*) Oxidized nitroprusside reagent—Mix equal parts of the 4.0 percent sodium nitroprusside solution and 4.0*N* sodium hydroxide, and let stand for 1 hour before using. Prepare daily, and store in amber bottle.

(*5*) Cycloserine standard solution—Prepare a standard solution of the cycloserine working standard in 0.1*N* sodium hydroxide to contain 100 micrograms per milliliter.

(*b*) *Procedure.* Transfer the contents of 10 capsules into a 1,000 milliliter volumetric flask. Add 0.1*N* sodium hydroxide to dissolve the sample, and add sufficient 0.1*N* sodium hydroxide to measure 1,000 milliliters. Mix well, and filter. Dilute an aliquot of the filtrate with sufficient 0.1*N* sodium hydroxide to give a concentration of 0.1 milligram per milliliter (estimated) and mix well. Pipette exactly 1.0 milliliter of the working standard solution and 1.0 milliliter of the sample solution into separate test tubes. Add exactly 3.0 milliliters of 1.0*N* acetic acid and exactly 1.0 milliliter of oxidized nitroprusside reagent to each of the test tubes; then mix thoroughly. Allow the tubes to stand at room temperature for 10 minutes–15 minutes, in order that maximum color intensity may develop. Using a reagent blank, determine the absorbance of the solutions at 625 millimicrons in a suitable spectrophotometer.

Calculation:

$$\text{Milligrams of cycloserine per capsule} = \frac{\text{Sample absorbance}}{\text{Standard absorbance}} \times \text{Labeled potency per capsule in milligrams.}$$

(ii) *Biological assay.* Using a high-speed blender, prepare an appropriate number of capsules in 500 milliliters of 1 percent potassium phosphate buffer, pH 6.0, and proceed as directed in § 148d.1(b)(1)(ii). The average potency is satisfactory if it contains not less than 90 percent and not more than 115 percent of the number of milligrams of cycloserine that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

§ 148d.3 Cycloserine capsules with isoniazid.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Cycloserine capsules with isoniazid are capsules composed of crystalline cycloserine and isoniazid, with or without, one or more suitable and harmless buffer substances, diluents, binders, and lubricants. Each capsule contains not less than 250 milligrams of cycloserine and not less than 150 milligrams of isoniazid. The moisture content is not more than 1.0 percent. The cycloserine used conforms to the requirements prescribed by § 148d.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* In addition to the labeling prescribed by § 148.3 of this chapter, the labeling of each package shall bear a warning to the effect that the drug is to be used in patients with tuberculosis who fail to respond to treatment with isoniazid, streptomycin, para-aminosalicylic acid, viomycin, pyrazinamide, or combinations of these drugs and that the drug may cause serious reactions such as convulsive seizures and mental disturbances. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.3 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) Cycloserine used in making the batch for potency (chemical and biological), toxicity, pH, crystallinity, and heavy metals.

(*b*) The batch for cycloserine content (chemical and biological), isoniazid content, and moisture.

(ii) Samples required:

(*a*) Cycloserine used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: Minimum of 30 capsules.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each package in the sample submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph; $1.50 for each capsule in the sample submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Chemical assays for cycloserine and isoniazid*—(*a*) *Preparation of sample.* Transfer the entire contents of four representative capsules to a 1,000-milliliter volumetric flask. Dilute to volume with distilled water, and mix well. Filter about 30 milliliters of the solution, discarding the first few milliliters of filtrate. Collect the remaining filtrate. Transfer a 10.0-milliliter aliquot of the filtrate to a 1,000-milliliter volumetric flask, dilute to volume with 0.1*N* hydrochloric acid, and mix well.

(*b*) *Preparation of cycloserine standard.* Accurately weigh about 30 milligrams of the cycloserine working standard and dissolve in sufficient distilled water to give a concentration of 1.0 milligram per milliliter. Transfer a 10.0-milliliter aliquot of this solution to a 1,000-milliliter volumetric flask. Dilute to volume with 0.1*N* hydrochloric acid, and mix well.

(*c*) *Preparation of isoniazid standard.* Accurately weigh about 30 milligrams of pure isoniazid and dissolve in sufficient distilled water to give a concentration of 1.0 milligram per milliliter. Transfer a 10.0-milliliter aliquot of this solution to a 1,000-milliliter volumetric flask. Dilute to volume with 0.1*N* hydrochloric acid, and mix well.

(*d*) *Procedure.* Adjust a suitable ultraviolet spectrophotometer to 100 percent light transmission with 0.1*N* hydrochloric acid in the absorption cell. Determine the absorbance values for the sample, the cycloserine standard, and the isoniazid standard at the absorption peaks at 219 millimicrons and 268 millimicrons. If a recording spectrophotometer is used, record the ultraviolet absorption spectrum from 210 millimicrons to 290 millimicrons. If a nonrecording spectrophotometer is used, determine the absorbance values at the absorption peaks. (The exact position of the peaks should be determined for the particular instrument used.)

(*e*) *Calculations*—(*1*) Cycloserine content: Determine the ratio (*R*) of the absorbance of the isoniazid standard at 219 millimicrons to its absorbance at 268 millimicrons.

$$R=\frac{\text{Absorbance of isoniazid standard at 219 millimicrons}}{\text{Absorbance of isoniazid standard at 268 millimicrons}}.$$

Correct the absorbance value of the sample at 219 millimicrons for the isoniazid equivalent as follows:

$$A_c=(A_1-A_2\times R),$$

where:

A_c = Corrected absorbance at 219 millimicrons;

A_1 = Absorbance of sample at 219 millimicrons;

A_2 = Absorbance of sample at 268 millimicrons.

Calculate the cycloserine content as follows:

$$\text{Milligrams of cycloserine per capsule}=\frac{A_c}{A_s}\times 250,$$

where:

A_s = Absorbance of cycloserine standard at 219 millimicrons.

The content of cycloserine is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams of cycloserine that it is represented to contain.

(*2*) *Isoniazid content*—(*i*) *Preparation of sample.* Use the solution prepared as directed in subdivision (i)(*a*) of this subparagraph.

(*ii*) *Preparation of standard.* Use the solution prepared as directed in subdivision (i)(*c*) of this subparagraph.

(*iii*) *Procedure.* Proceed as directed in subdivision (i)(*d*) of this subparagraph and obtain the absorbance of the sample and the isoniazid standard at the absorption peak at 268 millimicrons. Calculate as follows:

$$\text{Milligrams of isoniazid per capsule}=\frac{A_2\times 250}{A_1},$$

where:

A_1 = Absorbance of isoniazid standard at 268 millimicrons;

A_2 = Absorbance of sample at 268 millimicrons.

The content of isoniazid is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams that it is represented to contain.

(ii) *Plate assay method for cycloserine content.* Proceed as directed in § 148d.-2(b)(1)(ii). The average content of cycloserine in each capsule is satisfactory if it contains not less than 85 percent and not more than 120 percent of the number of milligrams that each capsule is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

PART 148f—GRAMICIDIN

§ 148f.1 Gramicidin.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Gramicidin is the white, or nearly white, odorless, crystalline compound of a kind of gramicidin or a mixture of two or more such compounds. It is so purified and dried that:

(i) It has a potency of not less than 900 micrograms of activity per milligram.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 3 percent.

(iv) The difference between the absorptivity value at the maximum occurring at 282 millimicrons and the absorptivity value at the minimum occurring at 247 millimicrons is 100±4 percent of the difference obtained with the gramicidin working standard.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, crystallinity, and identity.

(ii) Samples required of the batch: Ten packages, each containing approximately 500 milligrams.

(4) *Fees.* $4.00 for each immediate container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Culture medium.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F. Make nutrient broth for preparing an inoculum of the test organism, as follows:

Peptone	5.0 gm.
Yeast extract	1.5 gm.
Beef extract	1.5 gm.
Sodium chloride	3.5 gm.
Dextrose	1.0 gm.
Dipotassium phosphate	3.68 gm.
Potassium dihydrogen phosphate	1.32 gm.
Distilled water, q.s.	1,000.00 ml.

pH 7.0 after sterilization.

In lieu of preparing the medium from the individual ingredients specified above, the nutrient broth may be made from a dehydrated mixture that, when reconstituted with distilled water, has the same composition as such medium. Minor modifications of the individual ingredients specified are permissible if the resulting medium possesses growth-promoting properties at least equal to the medium described.

(ii) *Working standard.* Dry an appropriate amount of the gramicidin working standard for 3 hours at 60° C. and a pressure of 5 millimeters or less. Determine the dry weight and dissolve in sufficient 95 percent alcohol to obtain stock solution of 1,000 micrograms per milliliter. Keep this stock solution in the refrigerator. Do not use it later than 30 days after it is made.

(iii) *Preparation of sample.* Dissolve an appropriate quantity of the sample in a volume of 95 percent ethyl alcohol to obtain a convenient stock solution. Make further dilutions volumetrically in 95 percent ethyl alcohol to obtain a final concentration of 0.04 microgram per milliliter (estimated).

(iv) *Preparation of test organism.* The test organism is Streptococcus faecalis (ATCC 14506) which is maintained in 100-milliliter quantities of the nutrient broth described in subdivision (i) of this subparagraph. For the test, prepare a fresh subculture by transferring a loopful of the stock culture to 100 milliliters of nutrient broth, and incubate 16 hours to 18 hours at 37° C. For the daily inoculum, use 6.0 milliliters of the subculture for each 1,000 milliliters of nutrient broth needed in the assay.

(v) *Procedure.* Prepare solutions for the daily standard curve by diluting an aliquot of the stock working standard solution prepared as described in subdivision (ii) of this subparagraph in 95 percent ethyl alcohol to obtain concentrations of 0.028, 0.034, 0.040, 0.048, and 0.058 microgram per milliliter. Place 0.1 milliliter of each concentration of the standard curve and of the sample solution prepared as described in subdivision (iii) of this subparagraph in each of three replicate test tubes, 16 millimeters x 125 millimeters (outside dimensions). To each tube, add 9 milliliters of the inoculated broth described in subdivision (iv) of this subparagraph and place immediately in a water bath at 37° C. for 3 hours to 4 hours. Remove the tubes and add 0.5 milliliter of a 12 percent solution of formaldehyde to each tube. Read the absorbance values of each tube in a suitable photoelectric colorimeter, using a wavelength of 530 millimicrons. Set the instrument at zero absorbance with clear, uninoculated broth prepared as described in subdivision (i) of this subparagraph.

(vi) *Estimation of potency.* Plot the average absorbance values for each concentration of the standard on two-cycle semi-logarithmic graph paper with absorbance values on the arithmetic scale and concentrations on the logarithmic scale. Construct the best straight line through the points either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L=Absorbance value for the lowest concentration of the curve;

H=Absorbance value for the highest concentration of the standard curve;

a, b, c, d, e=Average absorbance values for each concentration of the standard curve.

Plot the values obtained for L and H and connect the points with a straight line. Average the absorbance value for the sample and read the gramicidin concentration from the standard curve. Multiply the concentration by appropriate dilution factors to obtain the gramicidin content of the sample.

(2) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, except inject subcutaneously with 0.5 milliliter of a suspension of the sample prepared by adding 2 milligrams activity (estimated) of gramicidin mixed well in 4 milliliters of sterile 1 percent aqueous solution of acacia.

(3) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(4) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

(5) *Identity.* Prepare 0.0075 percent solutions in ethyl alcohol of the sample and of the gramicidin working standard. Using a suitable recording spectrophotometer with 1-centimeter cells, record the ultraviolet absorbance spectrum of each solution from 220 millimicrons to 320 millimicrons. The ultraviolet absorbance spectrum of the sample solution should compare qualitatively to that of the working standard solution. Determine the absorbance at the maximum occurring at 282 millimicrons and at the minimum occurring at 247 millimicrons (the exact position of the maximum and minimum of the gramicidin working standard should be determined for the particular instrument used). Subtract the absorptivity value at 247 millimicrons from the absorptivity value at 282 millimicrons.

$$\text{Absorptivity difference}=\frac{\text{Absorbance at 282 millimicrons}-\text{Absorbance at 247 millimicrons}}{0.0075}.$$

PART 148g—GRISEOFULVIN

Sec.
148g.1 Griseofulvin.
148g.2 Griseofulvin tablets.

AUTHORITY: §§ 148g.1 to 148g.2 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148g.1 Griseofulvin.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Griseofulvin is a white to pale-cream compound of a kind of griseofulvin or a mixture of two or more such compounds. It is so purified and dried that:

(i) Its potency is not less than 900 micrograms per milligram.

(ii) It is nontoxic.

(iii) Its moisture content is not more than 1.0 percent.

(iv) Its melting point, after drying, is not less than 217° C. and not more than 220° C.

(v) Its specific rotation in dimethyl formamide at 25° C. is not less than +348° C. and not more than +364° C.

(vi) Its ultraviolet absorption spectrum in methyl alcohol is identical with that of the griseofulvin reference standard.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, toxicity, moisture, melting point, specific rotation, and identity.

(ii) Samples of the batch: 10 packages, each containing approximately equal portions of not more than 500 milligrams.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subparagraph (3)(ii) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Spectrophotometric assay*—(a) *Preparation of sample and standard solutions.* Accurately weigh approximately 35 milligrams each of the sample and standard, dissolve each in exactly 10.0 milliliters of dimethyl formamide, and mix well. Transfer 1.0-milliliter aliquots of the sample and standard to separate 500-milliliter volumetric flasks, bring to mark with distilled water, stopper, and mix well.

(b) *Procedure.* Adjust a suitable ultraviolet spectrophotometer to 100 percent light transmission with distilled water in the absorption cell. Determine the absorbance values for the sample and standard at the absorption peak at 294 millimicrons. If a recording spectrophotometer is used, record the ultraviolet absorption spectrum from 240 millimicrons to 320 millimicrons. If a nonrecording spectrophotometer is used, determine the absorbance value at the absorption peak. (The exact position of the peak should be determined for the particular instrument used.)

(c) *Calculations.* Determine the griseofulvin content of the sample as follows:

$$\text{Micrograms of griseofulvin per milligram}=\frac{A_1}{A_2}\times\frac{\text{Milligrams of standard}}{\text{Milligrams of sample}}$$
$$\times\text{Potency of the standard in micrograms per milligram,}$$

where:

A_1=Absorbance of sample at 294 millimicrons;

A_2=Absorbance of standard at 294 millimicrons.

(ii) *Plate assay*—(a) *Cylinders (cups).* Use cylinders described in § 141a.1(a) of this chapter.

(b) *Culture media.* Medium I: Dextrose 40.0 grams, peptone 10.0 grams, and distilled water sufficient to make 1,000 milliliters. The pH should be 5.65±0.05 after sterilization.

Medium II: Dextrose 40.0 grams, peptone 10 grams, agar 15.0 grams, chloramphenicol U.S.P. 0.05 gram (activity), and distilled water sufficient to make 1,000 milliliters. The pH should be 5.65±0.05 after sterilization.

Medium III: Dextrose 40.0 grams, peptone 10.0 grams, agar 15.0 grams, chloramphenicol U.S.P. 0.05 gram (activity), and distilled water sufficient to make 1,000 milliliters. The pH should be 5.65 ±0.05 after sterilization. To each 100 milliliters of this agar at approximately 50° C. aseptically add 2 milliliters of a sterile solution of cycloheximide. The solution contains 10 milligrams per milliliter and is prepared by dissolving cycloheximide in distilled water. The solution is sterilized by filtering through a membrane filter having a porosity of 0.22 micron.

(c) *Working standard.* Dissolve about 50 milligrams of the working standard, accurately rectified, in sufficient *N,N*-dimethylformamide (DMF) to give a concentration of 1,000 micrograms per milliliter. This solution may be kept for 3 months under refrigeration.

(d) *Preparation of sample.* Dissolve an appropriate portion of the griseofulvin sample in DMF to give a convenient stock solution. Further dilute with DMF to give a concentration of 100 micrograms per milliliter. Then further dilute one part of this with 19 parts of 0.1*M* potassium phosphate buffer, pH 8.0, to give a final estimated concentration of 5.0 micrograms per milliliter of griseofulvin.

(e) *Preparation of test organism.* Grow Microsporum gypseum (ATCC 14683) for 3 weeks at 25° C. in four 3-liter Erlenmeyer flasks, each containing 200 milliliters of Medium I. Remove the floating mat from the flask with a sterile wire loop and place in a sterile blending jar. Aseptically add 200 milliliters of sterile distilled water and blend for approximately 30 seconds, allow to settle, then decant about 150 milliliters of the supernatant into 100-milliliter sterile, capped centrifuge tubes. Add the amount of distilled water equal to the amount removed each time, and repeat this process 4 to 5 times to assure maximum recovery of spores from the mycelial mat. Centrifuge the tubes containing the spores at 4,000 r.p.m. for 15 minutes and discard the supernatant. Wash the residual spores from all tubes, using a minimum of sterile distilled water (2 milliliters to 3 milliliters, per tube) and pool the washings into a sterile flask containing a few sterile glass beads. (This procedure usually yields about 25 milliliters to 35 milliliters of spore suspension.) The spore suspension is stable for at least 2 months at 5° C.

(*f*) *Preparation of plates.* Prepare test plates using a 6-milliliter base layer of Medium II covered with a 4-milliliter seed layer of Medium III inoculated with varying volumes of spore suspension, e.g. 1 percent or 2 percent. Determine the proper percent of inoculum to be used by observation of the largest and clearest zones of inhibition given by 5 micrograms per milliliter of griseofulvin on the test plate. Add 6 milliliters of Medium II to a 20 millimeters x 100 millimeters Petri dish and allow to harden for use as a base layer. Cover the Petri dishes with sterile porcelain lids glazed on the outside. Add the proper amount (as previously determined) of the spore suspension to each 100 milliliters of Medium III which has been cooled to approximately 50° C. Mix the culture and agar thoroughly, and add 4 milliliters to each plate containing the uninoculated base agar. Tilt each plate back and forth to spread the inoculated agar evenly over the surface. When the agar has hardened, place six cylinders on the surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(*g*) *Standard curve.* Prepare the standard curve by diluting the 1,000 micrograms per milliliter griseofulvin solution to 64, 80, 100, 125, and 156 micrograms per milliliter in DMF. Then further dilute one part of each of these solutions with 19 parts of 0.1*M* potassium phosphate buffer, pH 8.0, to give final solutions of 3.2, 4.0, 5.0, 6.25, and 7.8 micrograms per milliliter. Use three plates for the determination of each point on the curve, except the 5.0 micrograms per milliliter solution, a total of 12 plates. On each of three plates fill three cylinders with the 5.0 micrograms per milliliter solution and the other three cylinders with the concentration of the standard curve under test. There will be thirty-six 5.0 micrograms per milliliter determinations and 9 determinations each for each of the other points on the curve. Incubate the plates for at least 48 hours at 30° C. and measure the diameters of the circles of inhibition. (Plates may be incubated longer if zones are indistinct.) Average the 36 readings of the 5.0 micrograms per milliliter concentration and the readings of the other concentrations for each set of three plates. The average of the 36 readings of the 5.0 micrograms per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 5.0 micrograms per milliliter reading for that set of 3 plates were the same as the correction point. Thus, if in correcting the 4.0 micrograms per milliliter concentration, the average of the 36 readings of the 5.0 micrograms per milliliter concentration is 16.6 millimeters, and the average of the 5.0 micrograms per milliliter concentration of this set of 3 plates is 16.4 millimeters, the correction is plus 0.2 millimeter. If the average reading of the 4.0 micrograms per milliliter concentration of these same three plates is 14.8, the corrected value is then 15.0 millimeters. Plot these corrected values, including the average of the 5.0 micrograms per milliliter concentration on semilogarithmic paper, placing the griseofulvin concentrations on the logarithmic scale and the diameters of the zones on the arithmetic scale. Draw the line of best fit by inspection or by calculation as described in § 141a.1(h) of this chapter.

(*h*) *Assay.* Use three plates for each sample. Fill three cylinders on each plate with the standard 5.0 microgram per milliliter solution and three cylinders with the sample solution to be tested, alternating standard and sample. Incubate the plates for at least 48 hours at 30° C. and measure the diameter of each circle of inhibition. To calculate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on each set of plates. If the sample gives larger average zone size than the standard, add the difference between them to the 5.0 micrograms per milliliter zone. If the average sample value is lower than the standard value, subtract the difference between them from the 5.0 micrograms per milliliter value on the curve. Read from the standard curve the concentration corresponding to the corrected zone size.

(2) *Toxicity.* Administer orally, by means of a cannula or other suitable device, to each of 5 mice within the weight range of 18 grams to 25 grams, 1.0 milliliter of a suspension of the drug containing 100 milligrams per milliliter in 10 percent aqueous solution of acacia. If no animal dies within 48 hours, the sample is nontoxic. If one or more animals die within 48 hours, repeat the test with 5 unused mice weighing 20 grams (±0.5 gram) each; if all animals survive the repeat test the sample is nontoxic.

(3) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(4) *Melting point.* Proceed as directed in the U.S.P.

(5) *Specific rotation.* Accurately weigh approximately 25 milligrams of the sample in a 25-milliliter glass-stoppered volumetric flask and dissolve in about 15 milliliters of dimethyl formamide. Bring to volume with dimethyl formamide, stopper, and mix well. Transfer to a 200-millimeter optical rotation tube. Determine the angular rotation in a suitable polarimeter, using a wavelength of 5893 Angstrom units, and calculate the specific rotation.

(6) *Identity.* Prepare solutions of each of the griseofulvin sample and of the reference standard containing 7 micrograms per milliliter in methyl alcohol. Record the ultraviolet absorption spectrum from 240 millimicrons to 320 millimicrons. The curves shall be similar, and each shall have a maximum at 291 millimicrons, ±2 millimicrons, and a minimum at 270 millimicrons, ±2 millimicrons.

§ 148g.2 Griseofulvin tablets.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Griseofulvin tablets are tablets composed of griseofulvin, with or without one or more suitable diluents, lubricants, and binders. Each tablet contains not less than 250 milligrams of griseofulvin. The moisture content is not more than 3.0 percent. Tablets not exceeding 15 millimeters in diameter, or not intended only for preparing solutions, shall disintegrate within 1 hour. The griseofulvin used conforms to the requirements of § 148g.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Requests for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The griseofulvin used in making the batch for potency, toxicity, melting point, specific rotation, and identity.

(*b*) The batch for potency, moisture, and disintegration time.

(ii) Samples required:

(*a*) Griseofulvin used in making the batch: 10 packages, each containing approximately equal portions of not less than 300 milligrams.

(*b*) The batch:

(*1*) For all tests except disintegration time: Minimum of 30 tablets.

(*2*) For disintegration time: Six tablets.

(*c*) In case of an initial request for certification, each other substance used in making the batch: One package of each containing not less than 5 grams.

(4) *Fees.* $0.75 for each tablet in the samples submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $3.00 for all tablets submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph; $4.00 for each package submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Chemical assay.* Proceed as directed in § 148g.1(b)(1)(i), except prepare the sample for assay by reducing to a fine powder not less than 10 average-weight tablets. Weigh accurately an amount of the fine powder equivalent to approximately 175 milligrams of griseofulvin. Transfer to a 50-milliliter volumetric flask. Add about 35 milliliters of dimethyl formamide, stopper, and shake approximately 30 minutes. Dilute to volume with dimethyl formamide and mix well. Centrifuge an aliquot (about 10 milliliters to 15 milliliters). Transfer a 1.0-milliliter aliquot of the clear supernatant to a 500-milliliter volumetric flask and dilute to volume with distilled water.

(ii) *Plate assay.* Powder the tablets as described in subdivision (i) of this subparagraph, and proceed as directed in § 148g.1(b)(1)(ii). The average content of griseofulvin is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams that it is represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.5(a) of this chapter.

(3) *Disintegration time.* Proceed as directed in § 141a.9(c) of this chapter. The tablets are satisfactory if they disintegrate within 1 hour.

PART 148h—KANAMYCIN SULFATE

Sec.
148h.1 Kanamycin sulfate.
148h.2 Kanamycin sulfate aqueous injection.
148h.3 Kanamycin sulfate capsules.

AUTHORITY: §§ 148h.1 to 148h.3 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148h.1 Kanamycin sulfate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Kanamycin sulfate is the crystalline sulfate salt of a kind of kanamycin or a mixture of two or more such salts. It is so purified and dried that:

(i) Its potency on the anhydrous basis is not less than 750 micrograms per milligram.

(ii) It is sterile.

(iii) It is nontoxic.

(iv) It is nonpyrogenic.

(v) It contains no histamine nor histamine-like substances.

(vi) Its moisture content is not more than 6 percent.

(vii) Its pH in an aqueous solution containing 10 milligrams per milliliter is not less than 6.5 and not more than 8.5.

(viii) It gives a positive identity test for kanamycin.

(ix) It contains not more than 5.0 percent kanamycin B.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, sterility, toxicity, pyrogens, histamine, moisture, pH, identity, crystallinity, and kanamycin B content.

(ii) Samples required:

(*a*) For all tests except sterility: 10 packages, each containing approximately 500 milligrams.

(*b*) For sterility testing: 10 packages, each containing approximately 500 milligrams.

(4) *Fees.* $10.00 for each container submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Cylinders (cups).* Use cylinders described under § 141a.1(a) of this chapter.

(ii) *Culture medium.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F. Make nutrient agar for the base and seed layers as follows:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Glucose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s.	1,000.0 ml.

pH 7.8 to 8.0 after sterilization.

(iii) *Working standard.* Dissolve a suitable quantity of the working standard accurately weighed, in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a convenient stock solution. The stock solution, when stored at a temperature of approximately 15° C., or less, may be used for a period not exceeding 1 month.

(iv) *Preparation of sample.* Dissolve a suitable quantity, accurately weighed, in 0.1*M* potassium phosphate buffer, pH 8.0, to give a convenient stock solution. Further dilute volumetrically in 0.1*M* potassium phosphate buffer, pH 8.0, to make a solution containing 5.0 micrograms of kanamycin base per milliliter (estimated).

(v) *Preparation of test organism.* The test organism is Staphylococcus aureus (ATCC 6538P) which is maintained on agar described in subdivision (ii) of this subparagraph, except that the pH after sterilization is 6.5 to 6.6. From a stock slant, inoculate a Roux bottle containing the same agar and incubate for 24 hours at 32° C. to 35° C. Wash the growth from the agar surface with 50 milliliters of sterile sodium chloride solution. If an aliquot of this bulk suspension, when diluted 1:20 with sterile sodium chloride solution, gives 25 percent light transmission in a suitable photoelectric colorimeter equipped with a filter having a wavelength of 580 millimicrons, it is satisfactory for use. It may be necessary to adjust the bulk suspension by dilution, so that an aliquot of the adjusted suspension diluted 1:20 gives 25 percent light transmission. (The adjusted bulk suspension only, and not the 1:20 dilution of it, is used in preparing the seed layer.) The bulk suspension may be stored for 1 week under refrigeration. Add 0.4 milliliter of the adjusted bulk suspension to 100 milliliters of agar described in subdivision (ii) of this subparagraph, which has been melted and cooled to 48° C.

(vi) *Preparation of plates.* Add 21 milliliters of the agar prepared as described in subdivision (ii) of this subparagraph to each Petri dish (20 millimeters x 100 millimeters). Distribute the agar evenly in the plates and allow to harden. Use the plates the same day they are prepared. Add 4.0 milliliters of the inoculum prepared as described in subdivision (v) of this subparagraph to each plate, tilting the plates back and forth to spread the inoculated agar evenly over the surface.

(vii) *Standard curve.* Prepare daily in 0.1*M* potassium phosphate buffer, pH 8.0, from the stock solution described in subdivision (iii) of this subparagraph, concentrations of 3.2, 4.0, 5.0, 6.25, and 7.81 micrograms per milliliter of solution. A total of 12 plates is used in the preparation of the standard curve, three plates for each solution except the 5.0 micrograms per milliliter solution. The latter concentration is used as the reference point and is included on each plate. On each of three plates, fill three cylinders with the 5.0 microgram per milliliter standard and the other three cylinders with the concentration under test. Thus, there will be thirty-six 5-microgram determinations and nine determinations for each of the other points on the curve. After the plates have incubated, read the diameters of the circles of inhibition. Average the readings of the 5.0 micrograms per milliliter concentration and the readings of the concentration tested for each set of three plates and average also all 36 readings of the 5.0 micrograms per milliliter concentration. The average of the 36 readings of the 5.0 micrograms per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 5.0 micrograms per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 4.0-microgram concentration, the average of the 36 readings of the 5.0 micrograms per milliliter concentration is 16.5 millimeters and the average of the 5.0 micrograms per milliliter concentration of this set of three plates is 16.3 millimeters, the correction is +0.2 millimeter. If the average readings of the 4.0 micrograms per milliliter concentration of these same three plates is 15.9 millimeters, the corrected value is then 16.1 millimeters. Plot these corrected values, including the average of the 5.0 micrograms per milliliter concentration, on 2-cycle semilog paper, using the concentration in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points, either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L = Calculated zone diameter for the lowest concentration of the standard curve;
H = Calculated zone diameter for the highest concentration of the standard curve;
c = Average zone diameter of 36 readings of the 5.0 micrograms per milliliter standard;
a, b, d, e = Corrected average values for the 3.2, 4.0, 6.25, and 7.81 micrograms per milliliter solutions, respectively.

Plot the values obtained for *L* and *H* and connect wtih a straight line.

(viii) *Assay.* Place six cylinders on the inoculated agar surface in each Petri dish prepared as described in subdivision (vi) of this subparagraph, so that they are at approximately 60° intervals on 2.8-centimeter radius. Use three plates for each sample. Fill three cylinders on each plate with the 5.0 micrograms per milliliter standard and three cylinders with the 5.0 micrograms per milliliter (estimated) sample, alternating standard and sample. Incubate plates for 16 hours to 18 hours at 32° C. to 35° C., and measure the diameter of each circle of inhibition.

(ix) *Estimation of potency.* Average the zone readings of the standard and average the zone readings of the sample on the three plates used. If the sample gives larger average zone size than the average of the standard, add the difference between them to the 5.0-microgram zone sizes of the standard curve. If the average value is lower than the standard value, subtract the difference between them from the 5.0-microgram value on the curve. From the curve, read the potencies corresponding to these corrected values of zone sizes.

(2) *Sterility.* Using 500 milligrams from each container tested, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, using 0.5 milliliter of a solution prepared by diluting the sample to approximately 2.0 milligrams (activity) per milliliter with sterile distilled water.

(4) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using a test dose of 1.0 milliliter per kilogram of an aqueous solution containing 10 milligrams per milliliter.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, using as a test dose 0.6 milliliter per kilogram of an aqueous solution containing 5 milligrams per milliliter.

(6) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a solution containing 10 milligrams per milliliter.

(8) *Identity.* Dissolve about 10 milligrams of kanamycin sulfate in 1 milliliter of water, and add 1 milliliter of a 1:500 solution of triketohydrindene hydrate in normal butyl alcohol, then add 0.5 milliliter of pyridine. Heat on a steam bath for 5 minutes, and add 10 milliliters of water; a deep-purple color is produced.

(9) *Kanamycin B content*—(i) *Cylinders (cups).* Use cylinders described under § 141a.1(a) of this chapter.

(ii) *Culture medium.* Use ingredients that conform to the standards prescribed by the U.S.P. or N.F. Make agar for the base and seed layers as follows:

Peptone	6.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Agar	15.0 gm.

ph 7.8 to 8.0 after sterilization.

(iii) *Working standard.* Dissolve a suitable quantity of the kanamycin sulfate reference standard, accurately weighed, in 0.1*M* potassium phosphate buffer, pH 8.0, to give a concentration equivalent to 1.0 milligram of kanamycin per milliliter.

(iv) *Preparation of sample.* To 50 milligrams, accurately weighed, of kanamycin sulfate in a suitable container (such as a 7.5-milliliter serum vial) add 2.5 milliliters of 6*N* hydrochloric acid, and tightly close the container. Heat in a water bath at 100° C. for 1 hour, and cool. Add 2 milliliters of 6*N* sodium hydroxide, then dilute with sterile 0.1*M* potassium phosphate buffer, pH 8.0, to obtain a concentration of the equivalent of 1 microgram of kanamycin B per milliliter (estimated).

(v) *Preparation of test organism.* Use Bacillus subtilis (ATCC 6633) maintained on the peptone agar described in subdivision (ii) of this subparagraph. From a stock slant, inoculate a Roux bottle containing approximately 300 milliliters of the same agar and incubate for 24 hours at 32° C. to 35° C. Wash the growth from the agar surface with 50 milliliters of sterile U.S.P. saline (T.S.). Determine by appropriate tests the quantity of this viable spore suspension to be added to each 100 milliliters of peptone agar to give sharp, clear zones of inhibition.

(vi) *Preparation of plates.* Add 21 milliliters of the agar prepared as described in this subparagraph to each Petri dish (20 millimeters×100 millimeters). Distribute the agar evenly in the plates and allow to harden. Use the plates the same day they are prepared. Add 4.0 milliliters of the fresh daily inoculum described in subdivision (iv) of this subparagraph to each plate, tilting the plates back and forth to spread the inoculated agar evenly over the surface.

(vii) *Standard curve.* Prepare on the day of testing in 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0, from the standard stock solution, sufficient volumes of the following concentrations: 0.64, 0.8, 1.0, 1.25, and 1.56 micrograms per milliliter. The 1.0 microgram per milliliter solution is the reference point of the standard curve. On each of three plates fill three cylinders with the 1.0 microgram per milliliter standard and the other three cylinders with the concentration under test. Thus, there will be thirty-six 1.0-microgram determinations and nine determinations for each of the other points on the curve. After the plates have incubated, read the diameters of the circles of inhibition. Average the readings of the 1.0 microgram per milliliter concentration and the readings of the concentration test for each set of three plates and average also all 36 readings of the 1.0 microgram per milliliter concentration. The average of the 36 readings of the 1.0 microgram per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 1.0 microgram per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 0.8-microgram concentration, the average of the 36 readings of the 1.0 microgram per milliliter concentration is 16.5 millimeters and the average of the 1.0 microgram per milliliter concentration of this set of three plates is 16.3 millimeters, the correction is +0.2 millimeter. If the average readings of the 0.8 microgram per milliliter concentration of these same three plates is 15.9 millimeters, the corrected value is 16.1 millimeters. Plot these corrected values, including the average of the 1.0 microgram per milliliter concentration, on 2-cycle semilogarithmic paper, using the concentration in micrograms per milliliter as the ordinate and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points, either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L=Calculated zone diameter for the lowest concentration of the standard curve;

H=Calculated zone diameter for the highest concentration of the standard curve;

c=Average zone diameter of 36 readings of the 1.0 microgram per milliliter standard;

a, b, d, e=Corrected average values for the 0.64, 0.8, 1.0, 1.25, and 1.56 micrograms per milliliter solutions, respectively.

Plot the values obtained for L and H and connect with a straight line.

(viii) *Assay.* Place six cylinders on the inoculated agar surface in each Petri dish prepared as described in subdivision (vi) of this subparagraph, so that they are at approximately 60° intervals on a 2.8-centimeter radius. Use three plates for each sample. Fill three cylinders on each plate with the 1.0 microgram per milliliter standard and three cylinders with the 1.0 microgram (estimated) per milliliter sample, alternating standard and sample. Incubate plates for 16 hours to 18 hours at 32° C. to 35° C., and measure the diameter of each circle of inhibition.

(ix) *Estimation of kanamycin B content.* Average the zone readings of the standard and average the zone readings of the sample on the three plates used. If the sample gives larger average zone size than the average of the standard, add the difference between them to the 1.0-microgram zone sizes of the standard curve. If the average value is lower than the standard value, subtract the difference between them from the 1.0-microgram value on the curve. From the curve, read the kanamycin potencies corresponding to these corrected values of zone sizes. Multiply the observed potency by 100 and divide by 126, to obtain a value representing the potency in terms of the milligram equivalent of kanamycin B sulfate. The calculated amount of kanamycin B sulfate is not more than 5 percent of the content of kanamycin sulfate found in subparagraph (1)(i) of this paragraph.

(10) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

§ 148h.2 Kanamycin sulfate aqueous injection.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Kanamycin sulfate for aqueous injection is an aqueous solution of kanamycin sulfate with suitable and harmless buffer substances and preservatives. Its potency is not less than 250 milligrams per milliliter. It is sterile. It is nontoxic. It is nonpyrogenic. It contains no histamine nor histamine-like substances. Its pH is not less than 3.5 and not more than 5.0. The kanamycin sulfate used conforms to the requirements of § 148h.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or the N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* (i) In addition to the requirements prescribed by § 148.3 of this chapter, the labeling of each package shall bear a warning to the effect that older patients and patients receiving a total dose of more than 20 grams of the drug should be carefully observed for signs of eighth-nerve damage. In patients with impaired kidney function or with prerenal azotemia, the risk of severe ototoxic reaction that may result in permanent deafness is sharply increased.

(ii) The expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The kanamycin sulfate used in making the batch for potency, identity, crystallinity, and kanamycin B content.

(*b*) The batch for potency, sterility, toxicity, pyrogens, histamine, and pH.

(ii) Samples required:

(*a*) The kanamycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: Minimum of 10 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $4.00 for each container in the samples submitted in accordance with subparagraph (3)(ii) (*a*), (*b*)(*1*), and (*c*) of this paragraph; $10.00 for all containers submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148h.1(b)(1), except prepare the sample for assay by introducing a representative aliquot of the solution equivalent to one dose into a 100-milliliter volumetric flask and dilute to mark with 0.1*M* potassium phosphate buffer, pH 8.0. Mix thoroughly and make to proper estimated dilution in pH 8.0 buffer. The average potency is satisfactory if the immediate containers contain not less than 90 percent and not more than 115 percent of the number of milligrams they are represented to contain.

(2) *Sterility.* Using the entire contents of single-dose containers or the equivalent of approximately 500 milligrams from each multiple-dose container tested, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Toxicity.* Proceed as directed in § 148h.1(b)(3).

(4) *Pyrogens.* Proceed as directed in § 148h.1(b)(4).

(5) *Histamine.* Proceed as directed in § 148h.1(b)(5).

(6) *pH.* Proceed as directed in § 141a.5(b) of this chapter using undiluted solution.

§ 148h.3 Kanamycin sulfate capsules.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Kanamycin sulfate capsules are composed of crystalline kanamycin sulfate, with or without one or more suitable and harmless buffer substances, vegetable oils, preservatives, diluents, binders, lubricants, colorings, and flavorings, enclosed in gelatin capsules. Each capsule contains the equivalent of not less than 500 miligrams of kanamycin base. The moisture content is not more than 6 percent. The crystalline kanamycin sulfate used conforms to the requirements of § 148h.1(a)(1) (i), (iii), (vii), (viii), and (ix). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) The kanamycin sulfate used in making the batch for potency, toxicity, pH, crystallinity, kanamycin B content, and identity.

(*b*) The batch for potency and moisture.

(ii) Samples required:

(*a*) Kanamycin sulfate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch: Minimum of 30 capsules.

(*c*) In case of an initial request for certification, each other ingredient used in making the batch: One package of each containing approximately 5 grams.

(4) *Fees.* $0.75 for each capsule in the sample submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph; $4.00 for each immediate container submitted in accordance with subparagraph (3)(ii) (*a*) and (*c*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Use either of the following methods:

(i) *Plate assay.* Proceed as directed in § 148h.1(b)(1), except prepare the sample for assay as follows: Place three capsules in a glass blending jar containing 500 milliliters of 0.1*M* potassium phosphate buffer, pH 7.8 to 8.0. Using a high-speed blender, blend 3 minutes to 5 minutes, and then remove an aliquot and make to the proper estimated dilution in pH 8.0 buffer.

(ii) *Turbidimetric assay.* Proceed as directed in the U.S.P.

The average potency of the capsules is satisfactory if they contain not less than 90 percent and not more than 115 percent of the number of milligrams they are represented to contain.

(2) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter.

PART 148l—[RESERVED]

PART 148m—OLEANDOMYCIN

Sec.
148m.1 Oleandomycin phosphate.
148m.2 [Reserved]
148m.3 Oleandomycin phosphate for injection.

AUTHORITY: §§ 148m.1 to 148m.3 issued under sec. 507, 59 Stat. 463, as amended 76 Stat. 785, 786, 787; 21 U.S.C.A. 357.

§ 148m.1 Oleandomycin phosphate.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Oleandomycin phosphate is the crystalline phosphate salt of a kind of oleandomycin or a mixture of two or more such salts. It is so purified and dried that:

(i) Its potency is not less than 775 micrograms of oleandomycin base per milligram.

(ii) It is sterile.

(iii) It is nonpyrogenic.

(iv) It is nontoxic.

(v) It contains no histamine nor histamine-like substances.

(vi) Its moisture content is not more than 5 percent.

(vii) Its pH in a solution containing 100 milligrams per milliliter is not less than 3.0 and not more than 6.0.

(viii) Its sulfated ash content is not more than 1 percent.

(ix) Its heavy metals content is not more than 30 parts per million.

(x) It gives a positive identity test for oleandomycin.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3(b) of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on the batch for potency, sterility, pyrogens, toxicity, histamine, moisture, pH, crystallinity, ash content, heavy metals, and identity.

(ii) Samples on the batch:

(*a*) For all tests except sterility: 10 packages, each containing equal portions of not less than 500 milligrams.

(*b*) For sterility testing: 10 packages each containing not less than 500 milligrams.

(4) *Fees.* $10.00 for each container submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for all samples submitted in accordance with subparagraph (3)(ii)(*b*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency*—(i) *Cylinders (cups).* Use cylinders described in § 141a.1(a) of this chapter.

(ii) *Culture media*—(*a*) Make nutrient agar for the seed and base layers as follows:

Peptone	6.0 gm.
Pancreatic digest of casein	4.0 gm.
Yeast extract	3.0 gm.
Beef extract	1.5 gm.
Glucose	1.0 gm.
Agar	15.0 gm.
Distilled water, q.s	1,000.0 ml.

pH 7.8 to 8.0 after sterilization.

(*b*) Use the nutrient agar described in subsection (*a*) of this subdivision for maintaining the test organism, except that its pH after sterilization is 6.5 to 6.6.

(iii) *Working standard.* Dissolve a suitable weighed quantity (usually 25 milligrams or less) of the working standard in 2 milliliters of ethyl alcohol, then add sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a concentration of 1,000 micrograms of oleandomycin base per milliliter. This stock solution may be kept in the refrigerator for 3 days.

(iv) *Preparation of sample.* Dissolve the sample in sufficient 0.1*M* potassium phosphate buffer, pH 8.0, to give a convenient stock solution. Further dilute in 0.1*M* potassium phosphate buffer, pH 8.0, to give a final concentration of 5.0 micrograms of oleandomycin base per milliliter (estimated).

(v) *Preparation of test organism.* The test organism is Staphylococcus epidermidis (ATCC 12228), which is maintained on slants of agar described in subdivision (ii)(*b*) of this subparagraph. Wash the organism from the agar slant with 3 milliliters of sterile sodium chloride solution onto a large agar surface such as that provided by a Roux bottle containing 300 milliliters of the agar described in subdivision (ii)(*b*) of this subparagraph. Spread the suspension of organisms over the entire agar surface with the aid of sterile glass beads. Incubate for 24 hours at 32° C. and then wash the resulting growth from the agar surface with about 50 milliliters of sterile sodium chloride solution. Standardize the suspension so that a 1:25 dilution of it will give 25 percent light transmission, using a suitable photoelectric colorimeter with a 580-millimicron filter and a 13-millimeter diameter test tube as an absorption cell. Run test plates to determine the quantity of the bulk suspension (usually 0.16 milliliter) that should be added to each 100 milliliters of agar to give clear, sharp zones of inhibition of appropriate size.

(vi) *Preparation of plates.* Add 21 milliliters of the agar prepared as described in subdivision (ii)(*a*) of this subparagraph to each Petri dish (20 millimeters x 100 millimeters). Distribute the agar evenly in the plates and allow it to harden. Use the plates the same day they are prepared. Melt a sufficient amount of the agar described in subdivision (ii)(*a*) of this subparagraph, cool to 48° C., add the proper amount of the test organism as described in subdivision (v) of this subparagraph, and mix thoroughly. Add 4 milliliters of this inoculated agar to each Petri dish. Distribute the agar evenly in the plates, cover with porcelain covers glazed on the outside, and allow to harden. After the agar has hardened, place 6 cylinders on the agar surface so that they are at approximately 60° intervals on a 2.8-centimeter radius.

(vii) *Standard curve.* Prepare the daily standard curve by further diluting the 1,000 micrograms per milliliter stock solution in 0.1*M* potassium phosphate buffer, pH 8.0, to obtain concentrations of 3.2, 4.0, 5.0, 6.25 and 7.80 micrograms per milliliter. Use three plates for the determination of each point on the curve, except the 5.0 micrograms per milliliter concentration, a total of 12 plates. On each of three plates, fill three cylinders with the 5.0 micrograms per milliliter standard and the other three cylinders with the concentration under test. Thus, there will be thirty-six 5-microgram determinations and nine determinations for each of the other points on the curve. After incubation, read the diameters of the circles of inhibition in the plates. Average the readings of the 5.0 micrograms per milliliter concentration and the readings of the point tested for each set of three plates and average also all 36 readings of the 5.0 micrograms per milliliter concentration. The average of the 36 readings of the 5.0 micrograms per milliliter concentration is the correction point for the curve. Correct the average value obtained for each point to the figure it would be if the 5.0 micrograms per milliliter reading for that set of three plates were the same as the correction point. Thus, if in correcting the 4.0-microgram concentration, the average of the 36 readings of the 5.0 microgram concentration were 20 millimeters, and the average of the 5.0-microgram concentration of this set of three plates were 19.8 millimeters, the correction would be +0.2 millimeter. If the average reading of the 4.0-microgram concentration of these same three plates were 19.0 millimeters, the corrected value would be 19.2 millimeters. Plot these corrected values, including the average of the 5.0 micrograms per milliliter concentration, on 2-cycle semilog paper, using the concentrations in micrograms per milliliter as the ordinate (the logarithmic scale) and the diameter of the zone of inhibition as the abscissa. Draw the standard curve through these points, either by inspection or by means of the following equations:

$$L=\frac{3a+2b+c-e}{5},$$

$$H=\frac{3e+2d+c-a}{5},$$

where:

L=Corrected zone diameter for the lowest concentration of the standard curve;

H=Corrected zone diameter for the highest concentration of the standard curve;

c=Average zone diameter of 36 readings of the 5.0 micrograms per milliliter standard;

a, b, d, e=Corrected average values for 3.2, 4.0, 6.25, and 7.81 micrograms per milliliter standard solutions, respectively.

Plot the values obtained for *L* and *H* and connect with a straight line.

(viii) *Assay.* Use three plates for each sample. Fill three cylinders on each plate with the standard 5.0 micrograms per milliliter solution and three cylinders with the 5.0 micrograms per milliliter (estimated) sample, alternating standard and sample. Incubate all plates, including those containing the standard curve at 32° C.–35° C. overnight, and measure the diameter of each circle of inhibition. To estimate the potency of the sample, average the zone readings of the standard and the zone readings of the sample on the three plates used. If the sample gives a larger zone size than the average of the standard, add the difference between them to the 5.0 micrograms per milliliter zone on the standard curve. If the average sample value is lower than the standard value, subtract the difference between them from the 5.0 micrograms per milliliter value on the curve, and read the potencies corresponding to these corrected values of zone sizes.

(2) *Sterility.* Using 500 milligrams from each container tested, proceed as directed in § 141a.2 of this chapter, except that neither penicillinase nor the control tube is used in the test for bacteria.

(3) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using sterile, pyrogen-free saline T.S. as a diluent, and inject 1.0 milliliter per kilogram of a solution containing 10 milligrams (activity) per milliliter.

(4) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, except inject 0.5 milliliter of a solution in sterile saline T.S. containing 8 milligrams of oleandomycin base per milliliter.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, using saline T.S. as a diluent, and injecting 1.0 milliliter of a solution containing 3 milligrams activity per milliliter.

(6) *Moisture.* Proceed as directed in § 141a.26(e) of this chapter, except use a sample of approximately 1 gram, accurately weighed.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using a solution containing 100 milligrams (activity) of oleandomycin per milliliter.

(8) *Crystallinity.* Proceed as directed in § 141a.5(c) of this chapter.

(9) *Ash content.* Proceed as directed in § 141e.401(g) of this chapter.

(10) *Heavy metals*—(i) *Preparation of reagents*—(*a*) *Ammonia, T.S.* Prepare an aqueous solution containing not less than 9 grams and not more than 10 grams of NH_3 per 100 milliliters.

(*b*) *Diluted acetic acid.* Dilute 60.0 milliliters of glacial acetic acid with sufficient water to give a solution of 1,000 milliliters.

(*c*) *Hydrogen sulfide, T.S.* Prepare a saturated solution of hydrogen sulfide by passing H_2S into cold water for a sufficient time. It is suitable if it produces at once a copious precipitate when added to an equal volume of 1*N* ferric chloride. Prepare a fresh solution of hydrogen sulfide T.S. each time a metals test is performed.

(*d*) *Lead nitrate stock solution.* Dissolve 159.8 milligrams of lead nitrate with 100 milliliters of water to which has been added 1 milliliter of nitric acid, and adjust with water to a volume of 1,000 milliliters. Prepare and store this solution in glass containers free from soluble lead salts.

(*e*) *Standard lead solution.* Dilute a 10.0-milliliter aliquot of the lead nitrate stock solution to 100 milliliters with water. This solution must be freshly prepared each time a heavy metals test is performed. One milliliter of this standard lead solution represents a level of 10 parts per million of lead.

(ii) *Preparation of the sample.* Use the sulfated ash obtained in the ash content test, or if necessary ash a separate weighing of 1.0 gram, accurately weighed, or 0.5 gram if the heavy metals limit is more than 30 parts per million. If a separate weighing of the substance is made, carefully ignite in a porcelain crucible at a low temperature until thoroughly charred. The crucible may be loosely covered with a porcelain lid during the charring. Add to the contents of the crucible 2 milliliters of nitric acid and 5 drops of sulfuric acid, and cautiously heat until white fumes are evolved, then ignite, preferably in a muffle furnace at 500° C. to 600° C. for 3 hours or until the carbon is all burned off. After cooling, add 2 milliliters of hydrochloric acid, and slowly evaporate to dryness on a steam bath. Moisten the residue with 1 drop of hydrochloric acid, add 10 milliliters of hot water, and digest for 2 minutes. Add, dropwise, ammonia T.S. until the solution is just alkaline to litmus paper, then add, dropwise, diluted acetic acid until the solution is slightly acid to litmus paper, and then add an excess of 2 milliliters of the diluted acetic acid. Filter if necessary, wash the crucible and the filter with about 10 milliliters of water, and dilute to exactly 25 milliliters.

(iii) *Procedure.* Place in a 50-milliliter Nessler tube 2 milliliters of diluted acetic acid and exactly the quantity of standard lead solution containing the lead equivalent of the heavy metals limit specified for the substance to be tested and add water to make 25 milliliters. Transfer the 25-milliliter solution of the sample, subdivision (ii) of this subparagraph, to a 50-milliliter Nessler tube, and add 10 milliliters of hydrogen sulfide T.S. to each tube, mix, allow to stand for 10 minutes, and view downward over a white surface; the color of the solution of the sample should be no darker than the standard that contains the lead equivalent of the heavy metals limit of the test.

(11) *Identity.* Dissolve about 10 milligrams of oleandomycin phosphate in 5 milliliters of hydrochloric acid and heat the solution in a water bath; a greenish-yellow color is produced.

§ 148m.3 Oleandomycin phosphate for injection.

(a) *Requirements for certification*—(1) *Standards of identity, strength, quality, and purity.* Oleandomycin phosphate for injection is oleandomycin phosphate, with or without one or more suitable and harmless buffer substances and preservatives. Each vial contains not less than 500 milligrams of oleandomycin activity as the phosphate salt. It is sterile. It is nonpyrogenic. It is nontoxic. It contains no histamine nor histamine-like substances. Its moisture content is not more than 5.0 percent. The pH of a reconstituted solution containing 5 milligrams of oleandomycin activity per milliliter is not less than 3.0 and not more than 5.0. The oleandomycin phosphate used conforms to the requirements prescribed by § 148m.1(a)(1). Each other substance used, if its name is recognized in the U.S.P. or N.F., conforms to the standards prescribed therefor by such official compendium.

(2) *Labeling.* It shall be labeled in accordance with the requirements of § 148.3 of this chapter. Its expiration date is 12 months.

(3) *Request for certification.* In addition to the requirements of § 148.4 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(*a*) Oleandomycin phosphate used in making the batch for potency, identity, and crystallinity.

(*b*) The batch for potency, sterility, toxicity, pyrogens, histamine, moisture, and pH.

(ii) Samples required:

(*a*) Oleandomycin phosphate used in making the batch: 10 packages, each containing approximately 500 milligrams.

(*b*) The batch:

(*1*) For all tests except sterility: Minimum of 10 immediate containers.

(*2*) For sterility testing: 10 immediate containers.

(4) *Fees.* $4.00 for each container in the sample submitted in accordance with subparagraph (3)(ii)(*a*) of this paragraph; $10.00 for each container submitted in accordance with subparagraph (3)(ii)(*b*)(*1*) of this paragraph; $10.00 for all immediate containers submitted in accordance with subparagraph (3)(ii)(*b*)(*2*) of this paragraph.

(b) *Tests and methods of assay*—(1) *Potency.* Proceed as directed in § 148m.1(b)(1), except prepare the sample for assay as follows: Reconstitute the drug in the immediate containers as directed in the labeling and remove with a syringe and needle equivalent to one dose. Dilute the one-dose sample volumetrically in 0.1*M* potassium phosphate buffer, pH 8.0, to give a final concentration of 5.0 micrograms of oleandomycin base per milliliter (estimated). The average potency is satisfactory if the immediate containers contain not less than 90 percent and not more than 115 percent of the number of milligrams they are represented to contain.

(2) *Sterility.* Proceed as directed in § 141a.2 of this chapter, using 500 milligrams (activity) of oleandomycin phosphate from each container tested.

(3) *Pyrogens.* Proceed as directed in § 141a.3 of this chapter, using 1.0 milliliter per kilogram of a solution containing 10 milligrams (activity) per milliliter in sterile, pyrogen-free saline T.S.

(4) *Toxicity.* Proceed as directed in § 141a.4 of this chapter, except use sterile saline T.S. as a diluent, and inject 0.5 milliliter of a solution containing 8 milligrams of oleandomycin activity per milliliter.

(5) *Histamine.* Proceed as directed in § 141b.105 of this chapter, using sterile saline T.S. as a diluent, and inject 1 milliliter of a solution containing 3 milligrams (activity) of oleandomycin per milliliter.

(6) *Moisture.* Proceed as directed in § 141a.5(a) or § 141a.26(e) of this chapter.

(7) *pH.* Proceed as directed in § 141a.5(b) of this chapter, using an aqueous solution containing 5 milligrams of oleandomycin base per milliliter.

(8) *Identity.* Dissolve about 10 milligrams of oleandomycin phosphate in 5 milliliters of hydrochloric acid and heat the solution in a water bath; a greenish-yellow color is produced.

All interested persons are invited to present their views in writing regarding this proposal to the Hearing Clerk, Department of Health, Education, and Welfare, Washington 25, D.C., within 30 days from the date of publication of this notice in the FEDERAL REGISTER. Such views and comments should be filed preferably in quintuplicate.

Proposals for the certification of various other antibiotic drugs will be published in the immediate future.

Dated: April 24, 1963.

GEO. P. LARRICK,
Commissioner of Food and Drugs.

[F.R. Doc. 63-4620; Filed, May 1, 1963; 8:45 a.m.]